REPORT TO CONGRESS

ON THE

NATIONAL DAIRY PROMOTION AND RESEARCH PROGRAM

AND THE

NATIONAL FLUID MILK PROCESSOR PROMOTION PROGRAM

JULY 1, 2003

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USDA REPORT TO CONGRESS ON THE DAIRY PROMOTION PROGRAMS 2003

INTRODUCTION

The enabling legislation of both the producer and processor dairy promotion programs (7 U.S.C. 4514 and 7 U.S.C. 6407) requires the U.S. Department of Agriculture (USDA) to submit an annual report to the House Committee on Agriculture and the Senate Committee on Agriculture, Nutrition, and Forestry by July 1. The producer and processor programs are conducted under the Dairy Promotion and Research Order (Dairy Order) (7 CFR 1150) and the Fluid Milk Promotion Order (Fluid Milk Order) (7 CFR 1160), respectively. This report includes a description of activities for both the producer and processor programs and summarizes activities of their national integrated fluid milk program. An accounting of funds collected and spent, an independent analysis of the effectiveness of the advertising campaigns of the two programs, and an industry-commissioned review of fluid milk markets and program operations are included. This report addresses program activities for the fiscal period January 1- December 31, 2002, of the Dairy Promotion Program and the Fluid Milk Processor Promotion Program, unless otherwise noted.

PRODUCER DAIRY PROMOTION PROGRAM

The Dairy Production Stabilization Act of 1983 (Dairy Act) (7 U.S.C. 4501 et seq.) authorized a national producer program for dairy product promotion, research, and nutrition education as part of a comprehensive strategy to increase human consumption of milk and dairy products. Dairy farmers fund this self-help program through a mandatory 15-cent per hundredweight assessment on all milk produced in the contiguous 48 States and marketed commercially. Dairy farmers administer the national program through the National Dairy Promotion and Research Board (Dairy Board). The Dairy Act provides that dairy farmers can direct up to 10 cents per hundredweight of the assessment for contributions to qualified State or regional dairy product promotion, research, or nutrition education programs (Qualified Programs).

The Dairy Order became effective on May 1, 1984. The Dairy Act required the Secretary of Agriculture to conduct a referendum among dairy farmers by September 30, 1985, to determine if a majority favored continuation of the program. Nearly 90 percent of the dairy farmers voting in the August-September 1985 referendum favored continuing the program. USDA held a second referendum on the dairy promotion program in August 1993. Approximately 71 percent of the dairy farmers who voted in the referendum favored continuing the program. USDA will hold future referenda at the direction of the Secretary or upon the request of at least 10 percent of the affected dairy farmers.

The Dairy Board portion of the revenue from the 15-cent per hundredweight producer assessment was \$86.6 million for 2002. Qualified Programs revenue from the producer assessment was \$172 million for 2002. Revenue from assessments for the Dairy Board and many of the Qualified Programs is integrated through a joint process of planning and program implementation so that the programs on the national, regional, State, and local level work together.

FLUID MILK PROCESSOR PROMOTION PROGRAM

The Fluid Milk Promotion Act of 1990 (Fluid Milk Act) (7 U.S.C. 6401 *et seq.*) authorized the establishment of a national processor program for fluid milk promotion and education. The Fluid Milk Order became effective December 10, 1993. The Secretary appointed the initial National Fluid Milk Processor Promotion Board (Fluid Milk Board) on June 6, 1994.

Processors administer this program through the Fluid Milk Board. Processors marketing more than 3,000,000 pounds of fluid milk per month, excluding those fluid milk products delivered to the residence of a consumer, fund this program through a 20-cent per hundredweight assessment on fluid milk processed and marketed in consumer-type packages in the contiguous 48 States and the District of Columbia.

The Fluid Milk Board's revenue for the January 1 through December 31, 2002, period was \$107.8 million. Approximately 69 percent of program expenditures was used for fluid milk advertising, 9 percent for promotions, and about 9 percent for public relations. The remaining funds were used for research and general and administrative expenses.

The Fluid Milk Act required the Secretary to conduct a referendum among fluid milk processors to determine if a majority favored implementing the program. In the October 1993 referendum, 72 percent of the processors voted to approve the implementation of the fluid milk program. These processors represented 77 percent of the volume of fluid milk products marketed by all processors during May 1993, the representative period set for the referendum. USDA held a continuation referendum in February-March 1996. Of the processors voting in that referendum, nearly 65 percent favored continuation of the program. These processors represented 71 percent of the volume of fluid milk products marketed by all processors during September 1995, the representative period set for the referendum. In November 1998, USDA held a continuation referendum at the request of the Fluid Milk Board. Fluid milk processors voted to continue a national program for fluid milk promotion established by the Fluid Milk Order. Of the processors voting in this referendum, 54 percent favored continuation of the order. These processors represented 86 percent of fluid milk products processed and marketed by fluid milk processors voting in the referendum. The Fluid Milk Act and Order state that USDA will hold future referenda upon the request of the Fluid Milk Board, of processors representing 10 percent or more of the volume of fluid milk products marketed by those processors voting in the last referendum, or when called by the Secretary.

NATIONAL INTEGRATED FLUID MILK PROGRAM

Dairy Management Inc. (DMI) – the staffing organization for the Dairy Board – and the Fluid Milk Board completed the integration of their fluid milk programs in January 1999, and this continued in 2002. The integration plan has enabled the Fluid Milk Board to fulfill the promotion program coordination requirements of the Fluid Milk Act. The funding level of the integrated program totaled approximately \$136 million in 2002, with about \$42 million from DMI and State and regional organizations and about \$94 million from the Fluid Milk Board. The integrated plan, which includes both planning and implementation, continues to be research-based, message-focused, and jointly managed.

A summary of the national integrated fluid milk program for fiscal year 2002 follows the Fluid Milk Board section in Chapter 1 of this report.

USDA OVERSIGHT AND INDEPENDENT ANALYSIS

USDA has oversight responsibility for both dairy promotion programs. The oversight objectives ensure that the Boards and the Qualified Programs properly account for all program funds and that they administer the programs in accordance with their respective Acts and Orders. USDA also has responsibility for obtaining an independent evaluation of the programs. The Boards reimburse the Secretary, as required by the Acts, for USDA's administrative costs of program oversight and for the independent analysis.

Chapter 1 of this Report describes the activities of the Dairy Board, Qualified Programs, and the Fluid Milk Board. Chapter 2 reviews the oversight activities of USDA. Chapter 3 reports the results of the independent analysis of the effectiveness of the programs conducted by Cornell University. Chapter 4 presents the industry-commissioned fluid milk market and program operations review.

CHAPTER 1

THE DAIRY PROMOTION PROGRAMS

In 2002, the National Dairy Promotion and Research Board (Dairy Board) and the National Fluid Milk Processor Promotion Board (Fluid Milk Board) continued to develop and implement programs to expand the human consumption of fluid milk and dairy products. While each promotion program has many unique activities, the two programs continued the integration of their fluid milk programs for the fourth year in 2002.

National Dairy Promotion and Research Board

The mission of the Dairy Board is to coordinate a promotion and research program that expands domestic and foreign markets for fluid milk and dairy products produced in the United States. The Dairy Board is responsible for administering the Dairy Promotion and Research Order (Dairy Order), developing plans and programs, and approving budgets. Its dairy farmer board of directors administers these plans and monitors the results of the programs.

The Secretary of Agriculture (Secretary) appoints 36 dairy farmers to administer the Dairy Order. The Secretary makes the appointments from nominations submitted by producer organizations, general farm organizations, qualified State or regional dairy product promotion, research, or nutrition education programs (Qualified Programs), and by other means as determined by the Secretary (7 CFR 1150.133(a)). Dairy Board members serve 3-year terms and represent 1 of 13 regions in the contiguous 48 States. Dairy Board members elect four officers: Chair, Vice-Chair, Treasurer, and Secretary. Current Dairy Board members are listed in **Appendix A-1**. A map of the contiguous 48 States depicting the 13 geographic regions is shown in **Appendix B-1**.

Total Dairy Board actual revenue for 2002 was \$86.7 million (includes assessments and interest). This amount was more than the Dairy Board budget of \$85 million for that period. The Dairy Board revised budget for 2003 projects total revenue of \$94.3 million from domestic assessments, import assessments, and interest. The Dairy Board administrative budget continued to be within the 5-percent-of-revenue limitation required by the Dairy Order. A list of actual income and expenses for 2000–2002 is provided in **Appendix C-1**. USDA's oversight and evaluation expenses for 2000–2002 are listed in **Appendix C-2**. **Appendix C-3** displays the Dairy Board's approved budgets and a comparison of program funding by function for 2001–2003. An independent auditor's report for 2002 is provided in **Appendix D-1**.

The Dairy Board has two standing committees: the Finance and Administration (F&A) Committee and the Executive Committee. The F&A Committee is made up of the Dairy Board officers and appointees named by the Dairy Board Chair. The Dairy Board Treasurer is the Chair of the F&A Committee, and the committee elects a Vice-Chair. The full Dairy Board serves as the Executive Committee. The remaining committees for the Dairy Board are joint program committees with the United Dairy Industry Association (UDIA).

Since January 1, 1995, the Dairy Board and UDIA have developed their marketing plans and programs through DMI. DMI facilitates the integration of producer promotion funds through a joint process of planning and program implementation so that the programs on the national, regional, State, and local level work together. The goals of DMI are to reduce administrative costs, to have a larger impact on the consumer, and to drive demand, thereby helping to increase human consumption of fluid milk and dairy products.

DMI funds 1- to 3-year research projects that support marketing efforts. Six Dairy Foods Research Centers and two Nutrition Institutes provide much of the research. Their locations and the research objectives are listed in **Appendix F-1.** Additionally, lists of DMI's dairy foods and nutrition projects are contained in **Appendices F-2** and **F-3**, respectively. Universities and other industry researchers throughout the U.S. compete for these research contracts.

From its inception, the DMI Board of Directors consisted of 12 dairy farmers from the Dairy Board and 12 dairy farmers from the UDIA Board. An amendment to the articles of incorporation of DMI to expand the DMI Board size took effect January 1, 2001, and the expanded DMI Board (77) now comprises all Dairy Board (36) and all UDIA Board (41) members.

The committees for program activities are comprised of board members from both the Dairy Board and UDIA Boards. The Dairy Board and UDIA Board separately must approve the DMI budget and annual plan before they can be implemented. In November 2001, both boards approved the 2002 unified dairy promotion plan budget and national implementation programs. The 2002 unified dairy promotion plan was designed to invest dollars where consumers are – not where dairy cows are. The unified dairy promotion plan was consistently implemented in demand-building consumer markets nationwide.

During 2002, DMI continued to host dairy director regional planning forums across the country to review and develop marketing strategies for development of the unified dairy promotion plan. These forums were originally designed to create *one* unified dairy promotion plan and allow opportunity for State and regional dairy board members to ask questions, raise concerns, and offer their thinking on the direction and development of a

unified dairy promotion plan. At the 2002 forums, dairy directors across the country continued to endorse promotion's long-term unified marketing plan, which for fluid milk focuses on young children and the mothers of those young children and for cheese focuses on adult segments called cheese "Cravers" and "Enhancers." Replacing the previous years' national dairy director forum, DMI staff visited local dairy director board meetings to gather input and present possible strategies for future programming. These meetings resulted in dairy director input and direction to continue to (a) emphasize programs with less reliance upon television advertising; (b) emphasize continuance of successful foodservice and retail activities; (c) highlight the need for heavier focus on kids and school milk problems; (d) stress more focus on industry partnerships; and (e) emphasize a stronger, more proactive image protection of dairy products. Combined 2002 spending for the unified dairy promotion plan totaled more than \$259 million. In addition to funding from the Dairy Board, the unified dairy promotion plan leverages resources from State and regional organizations, the Fluid Milk Board, the U.S. Dairy Export Council, and UDIA. The dairy farmer organizations have now turned their attention toward developing a new strategic direction for the unified dairy promotion plan.

The joint Dairy Board and UDIA Board committee structure provides the framework for DMI program activities. The Dairy Board and UDIA Board Chairs assign their respective board members to the following joint program committees: Cheese, Communications and Technology, Export and Dry Ingredients, and Fluid Milk. Each committee elects a Chair and a Vice-Chair. The joint committees and the DMI staff are responsible for setting program priorities, planning activities and projects, and evaluating results. The Joint Industry Partnering Committee and the Joint Evaluation Committee continued to operate in 2002. During 2002, the Dairy Board and UDIA Board met jointly five times.

The following information describes the activities for each program committee during 2002. **Appendix E-1** contains the DMI and Dairy Board contracts for projects reviewed by USDA during 2002.

CHEESE

The DMI umbrella cheese campaign "Ahh, the power of Cheese™ "continued to promote cheese directly toward "Cheese Lovers," with an emphasis on cheese "Cravers" and cheese "Enhancers." Cheese "Cravers" eat cheese primarily "as is," directly out of the package or off the block, and consume cheese as an important component of their food consumption routine. Cheese "Enhancers" have equally positive attitudes toward cheese but their consumption primarily takes the form of cheese as an ingredient in meal preparation. As in previous years, the DMI cheese television advertising campaign was recognized for creative excellence, winning numerous awards. **Table 1-1** contains a listing of DMI's 2002 cheese advertising executions.

TABLE 1-1 2002 Dairy Management Inc. Cheese Advertising

TelevisionPrintSay WhenCrackersChefKitchenParty's OverFishingMoonHolidaySantaArtichoke*Peppers*Chicken & Cheese*

SOURCE: Dairy Management Inc. (*Denotes Trade and Foodservice Print Advertising)

As in previous years, the cheese marketing effort included major retail co-marketing programs implemented in supermarkets representing more than 60 percent of U.S. retail grocery sales volume. These accounts included large national accounts like Kroger, Wal-Mart Supercenters, Safeway, and Albertsons. In these efforts, DMI provides retailer-customized media (television, radio, or direct mail) and in-store sampling, which are combined with the retailer's own advertising and merchandising support to drive cheese sales. Research has consistently shown that these co-marketing programs contribute to increased cheese category volume in participating stores.

In foodservice, DMI continued to implement trade advertising and public relations campaigns to keep cheese top-of-mind with restaurant operators. The trade print advertising is listed in **Table 1-1**. In July 2002, DMI announced its second annual Cheese Advisory Panel (CAP), comprised of six up-and-coming chefs from around the country, to spotlight American cow's milk cheeses. CAP members participated in a series of activities aimed at increasing awareness of high-quality American cheese and cheesemakers.

DMI also worked closely with top national restaurant chains, including Taco Bell®, Pizza Hut®, and Wendy's[®], to drive cheese volume and ensure that cheese was prominently featured in menu items. For example, DMI staff assisted Taco Bell® with consumer research and trend data to demonstrate the value and appeal that three cheeses would deliver to Quesadilla consumers. As a result, Taco Bell® developed and launched a new Steak Quesadilla item, which featured a blend of Cheddar, Pepper Jack, and Mozzarella cheeses. The item used an average of eight times more cheese than other items on their menu. Taco Bell® used television, print, the Internet, and in-store advertising to support the promotion. Also, DMI worked with Pizza Hut®, who declared summer 2002 the Summer of Cheese. The promotion, which ran for 12 weeks, featured the reintroduction of Stuffed Crust and Insider pizzas. The Summer of Cheese culminated with Pizza Hut's cheese usage increasing +4 percent during the promotion period and by 102 million pounds of cheese during the entire summer. And, for the fourth straight year, Wendy's estaurant reintroduced its popular Cheddar Lovers' Bacon Cheeseburger sandwich. During the 4-week promotion period, Wendy's[®] sold more than 12 million sandwiches, each featuring two slices of Cheddar cheese and a Cheddar sauce. The promotion used nearly 1.5 million pounds of cheese, and the chain's cheese use grew by 15 percent, compared to the same time period a year ago. DMI assisted Wendy's® with the development of this cheese-friendly sandwich in 1999.

DMI also executed a comprehensive product publicity program for cheese in 2002 that leveraged the continued success of the "Ahh, the power of Cheese" advertising campaign. Cheese publicity highlights included "America's Greatest Cheese Lover Search" and "World Class American Cheeses." "Americas Greatest Cheese Lover Search" featured a nationwide search for America's greatest cheese lover and most romantic cheese recipes. Entrants were asked to create an original recipe featuring American-made cow's milk cheese and describe how cheese has inspired romance in their lives. The grand prize winner submitted a recipe that featured Cheddar and Monterey Jack melted over fresh apples and pears, topped with spicy pepper jelly and brown sugar. The winner will be featured in a 2003 "Ahh, the power of Cheese" print advertisement and receive a trip for two to Vermont cheese country. "World Class American Cheeses" focused on public relations activities highlighting the rise of American-made cheeses and international recognition at recent competitions. The program also emphasized that many great American cheeses compare to other international cheeses in taste, quality and beauty, and educates consumers about the various nuances and complexities of different American-made, cow's milk cheeses. There were 49 American cow's milk winners at the 2002 World Championship Cheese Contest Awards, nearly one-third more than in 2000.

Also in 2002, website www.ilovecheese.com continued to add several new features aimed at triggering cheese lovers' craving for cheese. Cheese Chatter, a free, monthly e-newsletter about current cheese news, recipes and savings for cheese lovers, was sent to all www.ilovecheese.com chatter subscribers. The website continued to post high traffic numbers throughout the entire year. "Virtual Cheese Case," which supplies detailed information about domestic cow's milk cheeses, had several new additions. Also, the interactive "Cheese Profiler Survey" continues to assists website visitors in determining which cheeses best fit their lifestyle and suggests meal combinations and recipes.

COMMUNICATIONS AND TECHNOLOGY

Consumers receive mixed messages through the media about the nutritional value and benefits of food. DMI worked to provide consumers with education and information based on sound nutritional science and communicated the value of dairy products to consumers as well as to health professionals and educators. DMI also worked to inform dairy farmers about how their assessment dollars were being used. DMI continued to communicate to dairy producers and other industry audiences through publications (such as the annual report, joint newsletters with State and regional dairy promotion groups, and dairy cooperative check stuffers), dairy industry events (including major trade shows and producer meetings) and media relations (including press releases, feature placements, and farm broadcast interviews). For the fifth year, DMI continued its "Dairy Ambassadors" program, which uses a group of board members who are also dairy producers to deliver consistent messages about the dairy promotion program to producers and other industry audiences.

DMI continued its support for butter through cooperation and public relations activities with the American Butter Institute, including the website www.butterisbest.com, a consumer resource center with current cooking trends and ideas, butter recipes, and links to other butter-related sites. DMI also co-funded retail butter promotion activities with the California Milk Advisory Board in 2002. This effort helped to drive incremental retail butter sales in several markets across the Western U.S.

DMI's Chair, CEO, and board members participated in meetings with dairy cooperatives, industry associations, processors, and other groups throughout the country. The Dairy Board and the UDIA House of Delegates also endorsed continuation of dairy director regional planning forums in 2003. The 2002 local dairy director meetings were a success. Select DMI staff members attended local board meetings all across the country, soliciting input from dairy farmers to share ideas and thoughts about future dairy promotion activities. The meetings proved successful in solidifying industry support for continued regional planning forums and a unified marketing plan approach to dairy promotion.

Another activity of the Communications and Technology program was the issues management program. The objective of this program was to identify, monitor, and manage key issues that may influence consumer perceptions of dairy products. DMI coordinated its issues management activities with State and regional dairy promotion groups, as well as other dairy and agricultural groups. DMI worked with these groups to bring forth sound, science-based information to address consumer issues. Dairy Reputation Management, an industrywide effort that interacts with the Issues Management, Industry Relations, and Dairy Image Programs, continued a proactive program to educate and reinforce the positive attributes of dairy foods, dairy farmers, and dairy farming practices to consumers.

The Dairy Confidence Campaign, designed and initiated in 2001 to enhance existing dairy image and issues management programs, continued in 2002. Important 2002 accomplishments included completion of an industrywide crisis communications and preparedness plan to address a potential animal disease outbreak in the United States and completion of a new Foot and Mouth Disease Brochure. The brochure's development was a joint undertaking with the U.S. Dairy Export Council, National Milk Producers Federation, International Dairy Foods Association, and was developed in cooperation with USDA's Animal and Plant Health Inspection Service. Other support activities of the Dairy Confidence Campaign included completion of the web site for producers and consumers in the event of an emergency. Also, research was conducted to better understand consumer perceptions and concerns regarding animal health and safety issues. The monthly publication "Dairy Dialogue" was sent to keep people informed about important research and developments in the dairy industry.

Farmer-funded nutrition research continues to demonstrate that dairy products are a necessary food component in the diet of all people throughout the life cycle. Research continues to focus on improving childhood nutrition and on diseases that may see decreasing occurrences as a result of consuming dairy foods. Additionally, ongoing nutrition research is validating discoveries about the potential benefits of dairy food consumption in reducing obesity. There is an emergence of research that promises to bring forth

cutting-edge health breakthroughs in the reduction of obesity and related diseases. Transfer of these research outcomes has enhanced the image of the healthfulness of dairy foods held by many health professional organizations, which continue to endorse the role of dairy foods in a healthy diet.

Farmer-funded product research addresses safety and quality issues, continues to examine new milkfatbased ingredients, and provides technical support to the marketing of these ingredients.

EXPORT AND DRY INGREDIENTS

DMI's export enhancement program is implemented by the U.S. Dairy Export Council (USDEC). USDEC receives primary funding from three sources: DMI, USDA's Foreign Agricultural Service (FAS), and membership dues from dairy cooperatives, processors, exporters, and suppliers. In 2002, USDEC received \$6.7 million from DMI; \$2.7 million from USDA's Market Access Program and the Foreign Market Development Program that support commodity groups in promotion of their commodities in foreign markets; and \$700 thousand from membership dues. USDEC began its seventh year of operation in 2002, and its total budget was \$10.4 million.

USDEC has offices in Mexico City, Tokyo, Seoul, Hong Kong, Shanghai, Bangkok, Taipei, London, and Sao Paulo. Overall exports to Mexico posted a slight decrease under 2001 levels, but whey protein, lactose, and ice cream showed the largest increases, which were up 22 percent, 10 percent, and 75 percent respectively. In Japan and Korea, dairy ingredients and cheese were highlighted in 2002 – whey protein exports were up 19 percent and 3 percent respectively and cheese 21 percent and 12 percent; in China, only whey proteins experienced significant growth, at 52 percent over 2001. In other Southeast Asian markets, lactose saw the largest gains at 30 percent, and cheese settled in at around 15 percent growth. Specific 2002 promotions, not unlike those of 2001, included in-store retail promotions and sampling in supermarkets, joint promotions with food service companies, quarterly trade newsletters, exhibits at trade fairs, and seminars about U.S. dairy products presented to the press, end-users, and food distributors.

Final 2002 export data confirm that U.S. dairy product exports for the fourth year eclipsed the \$1 billion mark, and 84 percent of that total consisted of commercial, unsubsidized sales. Export volume, almost 9 billion pounds on a milk equivalent, total solids basis, represented just over 5 percent of total U.S. production in 2002. Total U.S. exports show a 3 percent increase in cheese and a 6 percent increase in whey proteins. All other export categories experienced declines.

Successful cheese programs in Mexico again focused on partnerships with Domino's Pizza, where USDEC's Mexico City office worked to add several new menu items, including "Cheesy Bread," an appetizer made with U.S. Cheddar cheese. The new appetizer program alone led to new cheese sales of 36 tons per week. In other ingredients, of note, the United States remains the world's leading single-country supplier of whey and lactose.

USDEC continued working to improve the export capabilities of domestic dairy companies. USDEC assists U.S. dairy exporters by providing up-to-date information on market conditions, global trade trends, and regulatory requirements for export. Ongoing reverse trade mission activities provide opportunities for domestic dairy product suppliers to meet potential importers visiting the U.S.

Building upon their success in 2001, USDEC produced two additional monographs – Cheese Category Management and American Pizza—Traditions and Trends. The category management monograph for cheese is designed to educate retailers on cheese category management. It includes detailed information on category management, cheese consumers, and types of effective cheese merchandising. The American Pizza monograph includes information on popular styles and trends, cheese blending for profit, cheese trends, and individual cheese profiles. English-language versions of these and other valuable export information can be accessed at www.usdec.com. For 2003, USDEC will continue to focus a significant portion of its market development programming toward the dairy ingredient and cheese sectors.

Nonfat dry milk and whey promotion efforts were conducted via advertising, public relations, trade shows, and the Web site www.doitwithdairy.com. The advertising theme "Do it with Dairy" was utilized throughout all activities. The "Do it with Dairy" ingredient marketing campaign reaches the food manufacturing/processing industry with key market-driven whey research results and usage messages. Several newsletters and other publications support this program. "Dairy Dimensions," a quarterly newsletter, focuses on developments in dairy technology research. "Dairy Ingredients Insider" is a newsletter in which dairy ingredient suppliers are able to track buyer attitudes, behaviors, buying patterns, and product development plans. The latter has become a key planning tool for some suppliers, as it enables them to effectively utilize and leverage market research developed by DMI.

DMI's Extraordinary Dairy Product Innovation/Research group hosted the 2002 Whey and Dry Milk Ingredients Forum to receive industry input on the direction of DMI's national research plan and consider research to foster dairy industry innovation. Nearly 100 industry representatives, including ingredient suppliers, food manufacturers, and university researchers, provided feedback that will be integrated into a variety of tactics as part of the effort to increase awareness and usage of whey and dry milk ingredients.

Also, for the fourth straight year, DMI sponsored the Discoveries in Dairy Ingredients Contest. The contest allows undergraduate college students to develop an innovative food product formulation using dry milk, whey, or whey derivatives such as whey protein concentrate and whey protein isolate. The contest has a dual purpose – to highlight the versatility and functionality of dairy ingredients while at the same time providing food science students with practical, marketable experience. The three prize categories include the Best Overall Product Award, the Product Marketability Award, and the Product Creativity Award. Winning entries were featured at the 2002 Institute of Food Technologists Food Expo. The winning products included: (1) a nutrient-enhanced yogurt-based drink, (2) a low-fat yogurt incorporating whey protein concentrate and nonfat dry milk, (3) a yogurt crisp, and (4) a French vanilla-flavored coffee creamer filling in a milk chocolate coating.

"Ingredient Insights," a newsletter designed expressly for food formulators and ingredient suppliers, continues to provide news about dairy ingredients, specific applications, and technical support resources. As a part of this program, DMI provides ingredient technical support systems for food technologists. The system features four tiers, enabling food technologists to request the level of support they find the most useful. The options range from requesting technical information via FAX-ON-DEMAND to direct dialogue with a researcher.

"Innovations in Dairy," a technical bulletin that details new dairy science and technology information and research, is executed through a series of authoritative, topical updates written from a practical perspective for the lay reader.

Research continues to focus on nonfat dry milk and whey in the areas of functionality, quality, packaging, and new applications. In addition, the application laboratory for nonfat dry milk at California Polytechnic State University and the whey application laboratory at the University of Wisconsin Center for Dairy Research continued to provide technical assistance to both those that produce the ingredients and those that use the ingredients in finished products. The Web site www.extraordinarydairy.com provides a network of resources and information to help the dairy and food industries bring innovative products, formulations, and processes to market.

Research is also exploring additional health benefits of whey. Pre-clinical (non-human) trials are currently exploring the role of specific whey proteins in reducing the risk of certain types of cancers, including breast and prostate cancer. Research trials are investigating a potential link between whey proteins and reducing the risk of hypertension, and specific whey proteins have shown anti-bacterial properties. Long term, this may lead to whey's use as an ingredient in addressing potential food safety concerns with certain perishable foods like meats or produce.

RESEARCH/NATIONAL DAIRY COUNCIL®

The National Dairy Council® (NDC), the nutrition marketing arm of DMI, has been the leader in dairy nutrition research, education, and communication since 1915. NDC provides timely, scientifically sound nutrition information to the media, physicians, dieticians, nurses, educators, consumers, and other health professionals.

In 2002, through a partnership with the American School Food Service Association[®], the NDC conducted a year-long School Milk Pilot Test. The test was conducted to determine how milk needed to be enhanced to get students to choose it over other beverage options. The test encompassed 100,000 students from 146 schools in 18 districts in 12 U.S. markets. Some result highlights from the test included: (1) milk sales increased 18 percent overall—15 percent in elementary schools and 22 percent in secondary schools; (2) most (86 percent) of the increase came from the lunch line, with 14 percent coming from à la carte and vending sales; and (3) where the enhanced milk program was offered, more students participated in the National School Lunch Program. Some of the school milk enhancements in the test included

contemporary plastic packaging, a minimum of three flavor offerings, adjusted container sizes for specific age groups, and milk offered in three locations – lunch line, à la carte, and vending machines. DMI is working to implement the changes in school districts across the United States.

Also in 2002, the National Dairy Council® and the American Academy of Pediatrics® partnered on a new Discovery Health Channel Series called *Kids HealthWorks*. This 26-segment series is geared toward parents and care givers of children from birth to 12 years of age. The series included several nutrition-related segments, including four that highlight the importance of dairy products in children's diets: (1) Calcium Crisis, (2) Milk Myths and Role Modeling, (3) Obesity and Weight Management, and (4) From the Bottle to the Cup/Lactose Intolerance.

Additionally, the National Dairy Council® sponsored the Healthy Schools Summit (Summit). The event was produced with guidance and support from over 30 education, children's health, and nutrition organizations and took place on October 7 and 8, 2002, at the International Trade Center in Washington, DC. More than 500 leaders from health, education, nutrition, and physical activity fields convened at the Summit to address the critical role schools play in helping to curtail the food and activity behaviors that negatively affect student health and learning. Chaired by former U.S. Surgeon General David Satcher and First Lady Laura Bush, the Summit launched a nationwide Action for Healthy Kids initiative to inform, motivate, and mobilize schools, school districts, and States to chart a healthier course for the Nation's children and adolescents.

National Dairy Council®-funded dairy nutrition research highlights in 2002 included:

- 1. The role of dairy as part of a heart-healthy diet.
- 2. The role of calcium-rich dairy products in successful weight loss and maintenance.
- 3. Dairy's role in the prevention and reduction of colon cancer.

FLUID MILK

Information on integrated fluid milk advertising, promotions, public relations, school marketing, strategic thinking, and other activities that include DMI, State and regional organizations, and the Fluid Milk Board is detailed in the national fluid milk integrated program summary in this chapter.

Qualified State or Regional Dairy Product Promotion, Research, or Nutrition Education Programs

Qualified Programs are certified annually by the Secretary. To receive certification, the Qualified Program must: (1) conduct activities that are intended to increase human consumption of milk and dairy products generally; (2) have been active and ongoing before passage of the Dairy Act, except for programs operated under the laws of the United States or any State; (3) be primarily financed by producers, either individually or through cooperative associations; (4) not use a private brand or trade name in its advertising and promotion of dairy products (unless approved by the Dairy Board and USDA); and (5) not use program funds for the purpose of influencing governmental policy or action (7 CFR 1150.153). A list of the 60 active programs is provided in **Appendix G**.

The aggregate revenue from the producers' 15-cent per hundredweight assessment directed to the Qualified Programs in 2002 was \$172 million (approximately 10 cents out of the 15-cent assessment). The Qualified Programs manage State or regional dairy product promotion, research, or nutrition education programs (**Tables 1-2** and **1-3**).

Some of these Qualified Programs participate in cooperative efforts conducted and coordinated by other Qualified Programs and/or other organizations such as DMI, the Dairy Board, and UDIA. Their goal in combining funding and coordinating projects is more effective and efficient management of producers' promotion dollars through larger, broad-based projects. For example, UDIA coordinates nationally through DMI the programs and resources for 19 federation members and their affiliated units to support the unified dairy promotion plan. (See Unified Marketing Plan as noted in Table 1-2).

TABLE 1-2 Aggregate Income and Expenditure Data Reported by the 60 Active Qualified Programs to USDA

| | 2001 | 2002 |
|---|--|---------------------------|
| | (in \$000's) | (in \$000's) |
| INCOME | | |
| Carryover From Previous Years | 53,422¹ | 48,5531 |
| Producer Remittances | 170,585 | 172,590 |
| Payments Transferred From Other Qualified Programs ² | 58,134 | 58,056 |
| Payments Transferred to Other Qualified Programs ² | (60,437) | (55,744) |
| Other ³ | 5,624 | <u>4,111</u> |
| Total Adjusted Annual Income | 227,328 | 227,566 |
| EXPENDITURES | | |
| General and Administrative | 7,727 [4.5%] | 7,620 [4.4%] |
| Advertising and Sales Promotion | 77,015 [45.3%] | 78,709 [45.0%] |
| Unified Marketing Plan ⁴ | 50,362 [29.6%] | 50,974 [29.2%] |
| Dairy Foods and Nutrition Research | 4,859 [2.9%] | 4,519 [2.5%] |
| Public and Industry Communications | 11,314 [6.7%] | 13,048 [7.5%] |
| Nutrition Education | 15,077 [8.9%] | 16,727 [9.5%] |
| Market and Economic Research | 1,705 [1.0%] | 1,382 [0.8%] |
| Other ⁵ | 1,908 _[1.1%] | <u> 1,878</u> [1.1%] |
| Total Annual Expenditures | $\overline{169,967} \overline{[100\%]}$ | 174,857 [100%] |
| Total Available for Future Year Programs | 57,3611 | 52,709 |

Differences are due to audit adjustments and varying accounting periods.

SOURCE: Aggregate income and expenditure data reported by the 60 active Qualified Programs to USDA.

TABLE 1-3 Aggregate Advertising Expenditures Data Reported by the 60 Active Qualified Programs to USDA

| | 2001 (in \$000's) | 2002 (in \$000's) |
|-----------------------|--------------------------|--------------------------|
| ADVERTISING PROGRAMS | | |
| Fluid Milk | 19,740 [25.6%] | $22,188^{1}$ [28.2%] |
| Cheese | 52,461 [68.1%] | 52,3181 [66.5%] |
| Butter | 141 [0.2%] | 134 [0.2%] |
| Frozen Dairy Products | 656 [0.9%] | 128 [0.1%] |
| Other ² | <u>4,017</u> [5.2%] | <u>3,941</u> [5.0%] |
| Total | 77,015 [100%] | $78,709^{1}$ [100%] |

Figure does not include local unified marketing plan advertising expenditures previously reported by individual UDIA units.

SOURCE: Aggregate income and expenditure data reported by the 60 active Qualified Programs to USDA.

² Payments transferred between Qualified Programs differ due to different accounting methods and accounting periods.

³ Includes interest, income from processors and handlers, sales of supplies and materials, contributions, and rental income.

⁴ Unified Marketing Plan: Reported local spending by United Dairy Industry Association units participating in the Dairy Management Inc. unified marketing plan to fund national implementation programs.

⁵ Includes capital expenses and contributions to universities and other organizations.

² Includes "Real Seal," holiday, multiproduct, calcium, evaporated milk, food service, product donations at State fairs and other events and contributions for displays or promotional events.

National Fluid Milk Processor Promotion Board

The Fluid Milk Board, as authorized in the Fluid Milk Promotion Act of 1990 (Fluid Milk Act), administers a fluid milk promotion and consumer education program that is funded by fluid milk processors. The program is designed to educate Americans about the benefits of milk, increase fluid milk consumption, and maintain and expand markets and uses for fluid milk products in the contiguous 48 States and the District of Columbia.

The Secretary of Agriculture appoints 20 members to the Fluid Milk Board. Fifteen members are fluid milk processors who each represent a separate geographical region, and five are at-large members. Of the five at-large members, at least three must be fluid milk processors and at least one must be from the general public. Three fluid milk processors and two public members serve as at-large members on the current Fluid Milk Board. The members of the Fluid Milk Board serve 3-year terms and are eligible to be appointed to two consecutive terms. Current Fluid Milk Board members are listed in **Appendix A-2**. A map of the Fluid Milk Board regions is shown in **Appendix B-2**.

The Fluid Milk Board elects four officers: Chair, Vice-Chair, Secretary, and Treasurer. Fluid Milk Board members are assigned by the Chair to the following committees: Advertising, Finance, Promotions, Public Relations/Medical and Scientific, Research, and Strategic Thinking. The program committees are responsible for setting program priorities, planning activities and projects, and evaluating results. The Finance Committee reviews all program authorization requests for funding sufficiency, the Fluid Milk Board's independent financial audit, and the work of the Board's accounting firm. The Fluid Milk Board met four times during its 2002 fiscal year.

The Fluid Milk Program is funded by a 20-cent per hundredweight assessment on fluid milk products processed and marketed commercially in consumer-type packages in the contiguous 48 States and the District of Columbia. The program exempts from assessment those processors who process and market 3,000,000 pounds or less of fluid milk products each month, excluding fluid milk products delivered to the residence of a consumer. Assessments generated \$108.1 million in 2002. The Fluid Milk Order requires the Fluid Milk Board to return 80 percent of the funds received from California processors to the California fluid milk processor promotion program. For 2002, the amount returned to California from the assessments was approximately \$10.2 million. The California fluid milk processor promotion program uses the funds to continue its promotion activities, which include the "got milk?" advertising campaign.

As a result of the Farm Security and Rural Investment Act of 2002, there were three principal changes to the Fluid Milk Order. These changes are discussed in the Order Amendments section of Chapter 2.

The actual income and expenses for 2000–2002 are provided in **Appendix C-4.** The Fluid Milk Board's administrative expenses continued to be within the 5-percent-of-assessments limitation required by the Fluid Milk Order. USDA's oversight and evaluation expenses for 2000–2002 are detailed in **Appendix C-5. Appendix C-6** contains the Fluid Milk Board's approved budgets for 2001–2003. **Appendix D-2** contains an independent auditor's reports for the period of January 1, 2002, through December 31, 2002.

The following summarizes Fluid Milk Board medical and scientific activities for the period of January 1, 2002, through December 31, 2002. The Fluid Milk Board's sponsorships, advertising, promotions, public relations, school marketing, and strategic thinking activities are incorporated in the National Fluid Milk Integrated Program summary.

MEDICAL AND SCIENTIFIC ACTIVITIES

The Fluid Milk Board has established a Medical Advisory Board (MAB) comprised of academic, medical, and health care professionals with expertise relevant to the health benefits of fluid milk. The MAB provided guidance to the Fluid Milk Board's development of key nutritional and health messages for consumers and health professionals. The MAB also reviewed nutrition and health messages for accuracy. The MAB members assisted the Fluid Milk Board in forging relationships with health and health professional organizations such as the American Heart Association, the National Medical Association, the American Dietetic Association, American Academy of Pediatrics, and the National Cancer Institute. They also appeared as medical professionals in the media, providing science-based statements supporting the health benefits of milk.

The medical and scientific activities of the Fluid Milk Board also included preparing press materials and acting as spokespersons on breaking research with relevance to fluid milk. The Fluid Milk Board created consumer and health professional materials to communicate current and emerging research in areas such as bone health, obesity, type-2 diabetes and heart disease, and the vital role milk plays in the diet of Americans. These communications and activities all continue to highlight milk's nutritional profile, which includes nine essential vitamins and minerals.

New in 2002 was the Fluid Milk Board's development and launch of the "Good For You" campaign. The "Good For You" program's primary goal is to promote milk's nutritional benefits. The program leverages breaking research with relevance to milk and is supported with advertising and public relations. Two print advertisements were created under this campaign and are listed in **Table 1-6** in this chapter. The MAB was instrumental in the development of this campaign, as they reviewed and discussed many existing and emerging research studies on milk, and explored ways to leverage the information in public relations and advertising messages.

The Fluid Milk Board also continued its lactose intolerance initiatives that focus on educating African Americans on the importance of incorporating milk into their diet and why it should not be a barrier to including milk in the diet.

National Integrated Fluid Milk Program

The Fluid Milk Board and DMI continued during 2002 to implement an integrated fluid milk marketing plan which is research-based, message-focused, and jointly managed. The totally integrated fluid milk marketing effort marked its fourth year in 2002. The 2002 funding level totaled approximately \$136 million, with \$42 million from DMI and State and regional organizations and about \$94 million from the Fluid Milk Board.

The purpose of the integrated program is to positively change the attitudes and purchase behavior of the country regarding fluid milk. The 2002 fluid milk marketing plan was designed to continue marketing and promotional activities to promote and increase the consumption of fluid milk and to identify and support growth opportunities for the industry. Many communication mediums were used to accomplish this objective, including television and print advertising, public relations, promotions, and others. The program's target audiences include: kids and young teen girls and boys 6-14; teen girls and boys 15-17; adults 18-34; moms 18-34; and two specific ethnic target audiences – Hispanics and African Americans.

In 2002, the national got milk? Milk Mustache advertising campaign, which provides the basis for advertising activities and other program delivery methods, was continued. A description follows of the 2002 integrated program activities for the Fluid Milk Board and DMI.

SPONSORSHIPS

In 2002, the national got milk? Milk Mustache Campaign continued leveraging a multiyear partnership with Walt Disney Corporation. The sponsorship provides a unique opportunity to raise milk's image among teens and young adults by highlighting the message that milk is a great beverage of choice for active teens and for athletes of all ages. As part of the partnership, milk has been named "the official training fuel" of Disney's Wide World of Sports. Also, the "Milk House," a state-of-the art facility that hosts more than 40 Amateur Athletic Union national championships annually, remained the centerpiece arena of Disney's Wide World of Sports. The "Milk House" has got milk? signage and milk mustache posters prominently positioned throughout the complex.

The Fluid Milk Board and DMI also continued their partnership with the National Basketball Association (NBA) during 2002 as part of a multiyear sponsorship. Through this sponsorship, the Fluid Milk Board and DMI have an additional mechanism to reach teens with sports nutrition and growth messages. For example, the NBA/got milk?[®] "Rookie of the Month" program featured monthly print advertisement with popular NBA stars highlighting the important nutrients that milk provides for active and growing bodies. The culmination of the program featured presentation of the 2002 NBA/got milk?[®] Rookie of the Year award to Pau Gasol. Gasol was also featured in the Rookie of the Year print advertisement. The year's complete winners list is in **Table 1-5.** In addition to these efforts, the NBA/got milk?[®] Rookie All-Star game and the NBA/got milk?[®] Rookie Challenge were big hits during the 2002 NBA All-Star Weekend activities.

ADVERTISING

The Fluid Milk Board and DMI integrated advertising program consists of television, print, and radio advertising as well as media-driven promotions. The Fluid Milk Board advertisements highlight specific, relevant, health-benefit messages about milk and its nutrient content, while media-driven promotions serve to extend the advertising campaign. DMI advertisements target kids and mothers with young children, and focus on making milk "fun" and a "want to have beverage" by kids.

During 2002, a new national chocolate milk television advertising campaign was developed and launched. The national chocolate milk television advertising campaign was launched as a major component of the marketing effort to increase milk consumption among teens. The chocolate milk "Shake Stuff Up" campaign, which featured commercials "Fragile," "Stereo," and "Rescue," communicate the unique taste of chocolate milk and remind teens how much they love the product. The advertisements feature teens shaking chocolate milk in unusual ways and having "fun" with chocolate milk to demonstrate the lengths to which teens will go to get it. The chocolate milk advertising campaign builds on the growing popularity of flavored milk products. "Chocolatier" and "Gargle," which were created in 2001, continued to air in 2002.

The national Hispanic advertising campaign continued as part of industry outreach to the growing Hispanic market. Prior to creativity concept development and testing, extensive research was conducted on Hispanic mom and teen audiences to gain knowledge to assist in developing several concepts. The commercials entitled "Behind" (two versions with chocolate and white milk) focus on the nutrient package of milk. Both ads feature moms with happy, active kids playing sports and enjoying friends and family. The advertisements' tagline "Mas leche, Mas logro" (More milk, More achievement) reminds moms of milk's nutrients and the benefits of serving both white and flavored milk to their families. There were also Hispanic print advertisements, featuring celebrity Itati Cantoral and everyday Hispanic moms, such as the "Diva Mom Contest" winner, Esperanza Barraza, to bring milk's nutrient message to the Hispanic audience.

In addition, other television and print advertising continued to promote fluid milk. Television commercials "Bounce" and "Pants," which targeted the teen and kid audiences with health-benefit messages, were developed and launched in 2002. "Substitute Teacher" and "Tug of War" continued to run during 2002. Of note, Nickelodeon and Cartoon Network produced several value-added milk-focused print and television advertisement featuring several "kid-popular" cartoon characters as part of the Fluid Milk Board and DMI's overall media purchases. Nickelodeon produced a "Jimmy Neutron - Boy Genius" print and television advertisement, and a Wild Thornberry's television commercial. Cartoon Network produced "Powerpuff Girls" television commercial.

Targeting mothers with young children, the new "Celebrity Ode to Mom" radio campaign launched in March 2002 with country singer Wynonna Judd and Rhythm & Blues star Aaron Neville giving thanks to their moms for giving them milk as children. The radio advertisements featured thirty second radio commercials, all with the "Ode to Mom" theme, and were sung in each of their respective musical styles. Ray Charles, Aretha Franklin, and Carlos Ponce (English and Hispanic versions) "Ode to Mom" radio commercials also aired in 2002.

Table 1-4 provides a complete listing of the print advertising. **Table 1-5** provides a complete listing by target audience of the 2002 fluid milk television advertising. **Table 1-6** lists other advertisements such as contests, awards, and "Moment" advertisements.

TABLE 1-4 Fluid Milk Print Advertising, 2002

| Celebrity | <u>Target</u> | Theme |
|---|--------------------|----------------|
| NBA Rookies of the Month | | |
| 2001 Dec. Brendan Haywood/Shane Battier | Teen Boys | Active |
| 2002 Jan. Richard Jefferson/Pau Gasol | Teen Boys | Active |
| 2002 Feb. Tenton Hassell/Jason Richardson | Teen Boys | Active |
| 2002 Mar. Jamaal Tinsley/Pau Gasol | Teen Boys | Active |
| 2002 Apr. Zeljiko Rebraca/Gilbert Arenas | Teen Boys | Active |
| 2002 Nov. Drew Gooden/Caron Butler | Teen Boys | Active |
| NBA Rookie of the Year 2002 | | |
| Pau Gasol | Teen Boys | Active |
| Super Bowl Moment Ads | | |
| Opposing Quarterbacks-Tom Brady & Kurt Warner | Men/Women/Teens | Active |
| Winning Quarterback-Tom Brady | Men/Women/Teens | Active |
| Alfred E. Neuman | Teen Boys | Strong Bones |
| Andie MacDowell | Women | Beauty |
| Andre Agassi & Mom | Women | Active |
| Clint Black | Women | Active |
| Carson Daly | Teen Girls | Bone Growth |
| Cirque du Soleil | Women | Osteoporosis |
| Elton John | Women/Men | Osteoporosis |
| Gisele (English and Espanol Versions) | Women | Strong Bones |
| ason Kidd | Teen Boys | Active |
| essica Alba | Teens | Bone Growth |
| oe Rogan | Teens | Chocolate Milk |
| Kevin Garnett | Teen Boys | Active |
| Kim Cattrall | Women | Osteoporosis |
| Lili Estefan | Moms/Kids/Hispanic | Bone Growth |
| Mandy Moore | Teen Girls | Bone Growth |
| Marion Jones | Women | Active |
| Mat Hoffman | Teen Boys | Chocolate Mill |
| Nelly | Teens | Active |
| Patricia Heaton & Mom | Moms/Women | Chocolate Mill |
| Scrubs | Women | Strong Bones |
| Steven Tyler | Women | Strong Bones |
| Гот Brady | Men/Women/Teens | Active |
| Zhang Ziyi | Teens | Active |

SOURCE: Fluid Milk Board and DMI.

TABLE 1-5 Fluid Milk Television Advertising, 2002

Kids Television Teens Television Chocolatier Chocolatier Gargle Gargle Fun Fun Tug of War Tug of War Bounce Bounce **Pants** Pants Substitute Teacher Fragile Powerpuff Girls Stereo Substitute Teacher Jimmy Neutron

Adult Television
Chocolatier
Gargle
Tug of War
Rescue

Hispanic Television
Behind (white milk)
Behind (flavored milk)

SOURCE: Fluid Milk Board and Dairy Management Inc.

Wild Thornberry's

TABLE 1-6 Fluid Milk: Other Advertising, 2002

Advertisements/Contests **Theme Target** Women Moment Ad Calcium Summit Contest and Winner Hispanic Hispanic Diva Mom Contest Contest and Winner ESPN/Hometown Rookie (2) Teens Women Good For You Journal of the American Dietetic Association Journal of the American Medical Association Women Good For You 3v3 Soccer Shootout Tour - Ultimate Soccer Mom Women Contest and Winner Teens Winners Scholar Athlete Milk Mustache of the Year 2002 Scholar Athlete Milk Mustache of the Year 2003 Teens Entry Announcement Teen Girls Contest and Winner Seventeen/Mad About Milk (2) Hispanic Contest Star Mom Teen People - Got Talent?/Get Tickets! (2) Teens Contest and Winner Moment Ad Uncle Sam Women Teen Girls Contest and Winner YM/Kickin it with Milk (2)

Target Theme **Outdoor Advertising** Cal Ripkin, Jr. Teens Active Women Osteoporosis Cirque du Soleil Moms/Women/Men Strong Bones Dixie Chicks Women/Moms/Kids/Teens Strong Bones Jackie Chan Active Teens Kevin Garnett Moms/Kids/Hispanic Bone Growth Lili Estefan Strong bones Marc Anthony Moms/Teens/Men/Hispanic Teens/Kids/Hispanic Growth Ronald McDonald Women/Moms/Men Active Rulon Gardner Women Strong Bones Steven Tyler Teens Tony Meola Active

SOURCE: Fluid Milk Board and Dairy Management Inc. Note: (2) indicates two print advertisement executions.

PROMOTIONS

The Fluid Milk Board and DMI conduct promotions to increase fluid milk sales in retail outlets. The promotions work to move more milk out of the grocery store refrigerator and to increase sales in other retail outlets such as convenience stores, independent grocery stores, drug stores, and mass merchandisers. Some of the promotions work with partners to increase the appeal of the program when appropriate. After carefully measuring the results of the numerous promotion strategies in 2001, promotion activity in 2002 focused on feature incentives—a promotion vehicle used to increase advertisements and displays of milk—and programs offering prizes directly to consumers to help drive incremental purchases.

The Fluid Milk Board and DMI conducted three national promotions. "Nothin' But Flavor" was designed to bring new consumers to the category and increase chocolate milk sales through feature advertisements and dairy aisle displays of flavored milk. The spring promotion, held during the months of February and March, leveraged the integrated milk marketing NBA partnership by providing special National Basketball Association (NBA)/Chocolate Milk logo prizes. Over 1,330 retailers participated in the promotion, representing over 23,697 stores. The 5-week chocolate milk promotion surpassed the performance level of the 2001 event by generating increased sales of flavored milk products. Flavored milk sales increased 10.8 percent during the promotion and 4.6 percent thereafter, when compared to pre-promotional periods. As in the previous year's promotions, this success is attributed largely to greater product availability and increased retailer participation.

The "Full Chill Flavor" contest was a national promotion partnership with Music Television (MTV) and targeted the teen audience. It featured an on-line contest entitled "Summer Beach House Trivia" at www.mtv.com, where viewers had to answer questions about specific segments of the MTV channel online. The winner was awarded a trip to the MTV Summer Beach House. During the promotion, flavored milk sales increased 4 percent and continued with a sustained 0.4 percent increase after the promotion ended.

Capitalizing on the summer 2002 blockbuster movie "Spider-Man," the milk industry partnered with Kellogg's and Sony Pictures to create a milk and cereal retail promotion. The promotion's two main goals were to drive incremental white gallon volume and increase in-store visibility of milk with Point-of-Sale and Near-Pack Coverage materials. The promotion offer invited consumers to "Buy 2 gallons of milk and 2 boxes of specially marked Kellogg's cereal" and receive a one-of-a-kind Spider-Man Movie PC Game. To help support the promotion, 15-second radio tags were created and added to the "Ode to Mom" radio advertising, and a 10-second television tag was added to two of the kid television spots running on Nickelodeon and Cartoon Network during the month of April. Final Spider-Man PC Game fulfillment figures indicated that more than 610,000 consumers took advantage of the mail-in offer and that the promotion created 4.2 million gallons of incremental purchases.

PUBLIC RELATIONS

The public relations programs continued to focus on the nutritional benefits of milk, emerging scientific studies that highlight milk's benefits, leveraging the high interest generated by the celebrities and the got milk? Milk Mustache campaign, and preparing for and responding to misconceptions and negative news about milk or the educational campaign. A wide variety of initiatives were implemented to reach specific target audiences. During 2002, over 1 billion media impressions were garnered through the integrated public relations program. The program also provided support for three national retail promotions by helping to build public awareness and increase retailer participation.

In January 2002, the Fluid Milk Board and DMI launched the 2002 "got milk? 3v3 Soccer Shootout Tour" to remind American families about the importance of drinking milk for an active lifestyle and to position milk as nature's sports drink with nine essential vitamins and minerals including calcium and protein. The 4-month tour visited 50 cities nationwide. The theme for this year's tour was the nationwide search for the "Ultimate Soccer Mom." Kids had the opportunity to nominate their moms at each tour stop and at www.whymilk.com. The winning mom, Tammy Bristow, received a new minivan, appeared in a Milk Mustache print advertisement, and was given a trip to Walt Disney World along with her entire family.

For the fifth consecutive year, the Milk Mustache Mobile Tour also made its way around the United States. The "Milk Rules! Road Trip" ran from March through October 2002 and covered 100 cities nationwide. This year's theme was rock music, and the tour comprised the majority of the grassroots marketing program, focused on flavored milk, and targeted teens under 18. The tour featured a partnership with MTV and *Rolling Stone* magazine and offered teens the chance to participate in events and win prizes. One of the winners received a behind-the-scenes trip to MTV studios in New York to co-produce an episode of the show's popular Total Request Live. Another highlight included the Great Soda Swap Station, which promoted flavored milk in single-serve containers and encouraged teens to trade in their sodas for the more nutritious milk. Teens were given the opportunity to sample various flavored milk from local processors. The tour also included a "Be a got milk? Rock Star" photo contest. The winner received a chance to pose for a got milk? ad in *Rolling Stone* magazine.

The Fluid Milk Board and DMI, partnering with Mott's Applesauce, launched the "Mix it With Milk" public relations program, targeting kids ages 6–12 and moms. The multiyear program aims to make milk a "want-to-have" beverage for kids, help moms make milk fun for kids to drink and motivate kids and moms to choose milk more often by involving kids with milk in a fun and creative way. As an added-value promotion opportunity, Mott's contributed more than \$2 million to a 3-month promotion effort by sponsoring the "Mix it With Milk and Mott's" contest. The contest encouraged kids to invent "fun" milk drinks consisting of one glass of milk, ½ cup of Mott's Apple Sauce or Mott's Fruitsations, and any other ingredient such as flavored syrup or cookie crumbs. The winner received a \$5,000 college scholarship and a trip to the "Big Apple" (New York City).

Brochures and other information on milk were made available to consumers through Web site www.whymilk.com.

STRATEGIC THINKING

The Fluid Milk Strategic Thinking Initiative (FMSTI) is a joint effort of the Fluid Milk Board, DMI, the Milk Industry Foundation, processors, and suppliers. This ongoing effort was established to address barriers to fluid milk consumption not targeted by the advertising, promotion, and public relations activities of the Fluid Milk Board and DMI. In 1998, the Task Force began a series of research projects on how to improve fluid milk sales in five priority areas, including vending, home-meal replacement, nutraceuticals, convenience stores, and foodservice. The FMSTI is focusing on increasing and expanding the availability of milk in these marketing channels. The results of research released during 2002 follow.

As part of the ongoing three-part foodservice study, the FMSTI's research revealed that restaurant patrons want milk with their meals. The study was part of a plan to identify ways to sell more milk in all facets of the restaurant arena, including quick-serve, mid-scale, and upscale restaurants as well as office cafeterias. Part of the study explored consumer perceptions, such as the freshness or coldness of milk served in restaurants. The study revealed that customers had more positive reactions to milk served in single-serve, branded, plastic packaging.

SCHOOL MARKETING

The National Dairy Council® (www.nationaldairycouncil.org), whose programs are managed by DMI, works with school foodservice professionals and teachers to raise student awareness of the importance of having milk and dairy products as a part of a healthy lifestyle. As in 2001, several integrated milk programs were extended into schools through school foodservice professionals using posters and other tie-in activities.

A very successful 2002 school promotion was "Milk – The All-American Drink." This promotion was implemented in more than 34,000 schools across the country and included cafeteria kits that featured posters, backpack tags for students, and other exciting tools for foodservice directors to use in actively promoting milk consumption. More importantly, two classroom lesson components were included in the kits sent to middle schools. In the first lesson, "Take Interest in Strong Bones," students were challenged to become aware of how their perceptions of Milk Group Foods intake compare with their actual consumption. The second lesson, "All-American Choices in the Cafeteria" stressed the need for Milk Group foods in students' daily diets. Many school foodservice directors and teachers commented that they were very pleased at the positive promotion of milk beverages in schools.

Another successful school marketing activity is the Expanding Breakfast Program, which is aimed at increasing school milk consumption. Current program estimates indicate 4.6 million additional half-pints of milk were consumed through mid-2002. The program offers alternatives to the traditional school breakfast program like "grab-n-go" meals and breakfast in the classroom options.

Reaching kids through the classroom with various programs continues to be the focus of nutrition education efforts. "Pyramid Café®" and "Pyramid Explorations, "targeted to second and fourth grades, reach over 12 million students with messages that milk and dairy products are a key part of a healthy diet. Survey results continue to show a very high utilization rate for these two programs, currently at over 70 percent of the instructors that have the programs.

On January 17, 2002, the National Dairy Council® and the Fluid Milk Board jointly sponsored Calcium Summit II – "Agenda for Action: Reaching and Teaching America's Youth." This summit was a follow up to the 1999 first-ever Calcium Summit, which was designed to create awareness of the calcium deficiency problem among the general U.S. population. Calcium Summit II focused on America's youth and on moving from awareness to solutions. Representatives from 44 health organization and Government groups signed on as "Coalition Participants" to support the Summit's mission. More than 150 representatives of the 44 health organization and Government groups attended the event, which was held in Washington, DC.

Combined Web sites www.familyfoodzone.com and www.nutritionexplorations.org continue to deliver valuable resources to teachers, school foodservice professionals, and consumers. The site includes lesson plans for educators, resources for school foodservice directors, ideas for smart eating for families, and fun activities for kids. In 2002, www.nutritionexplorations.org delivered more than 70,000 lesson plans and 3 million dairy impressions and also received another World Wide Web Health Award. The World Wide Web Health Awards, organized by the Health Information Resource Center, recognize the best health-related Web sites for consumers and professionals each year. This site has won the award every year since 1999.

OTHER RESEARCH

2002 milk-related nutrition and product research was continued in the following areas:

- 1. The role of milk and milk products in the prevention of colon cancer and reduction of blood pressure.
- 2. Establishing the genetic basis for the activity of probiotic cultures.
- 3. Demonstration of milk consumption by teens to meet their calcium needs without adversely affecting weight.
- 4. The contribution of dairy's nutrient package in the development and maintenance of strong bones.
- 5. Investigation of added value of fortification through the use of probiotics, nutraceuticals, nutrient delivery, and flavor enhancement.
- 6. The impact of differing milk options and experiences in schools on childhood fluid milk consumption behavior and attitudes.

CHAPTER 2

UNITED STATES DEPARTMENT OF AGRICULTURE

Dairy Programs of USDA's Agricultural Marketing Service (AMS) has the day-to-day oversight responsibilities for the Dairy Board and the Fluid Milk Board. Dairy Programs oversight activities include reviewing and approving the Dairy and Fluid Milk Boards' budgets and budget amendments, contracts, advertising campaigns, and investment plans. Approval of program materials is also a responsibility of USDA. Program materials are monitored for conformance with their respective Acts and Orders and with other legislation such as the Nutrition Labeling and Education Act.

Dairy Programs continues to ensure that the collection, accounting, auditing, and expenditure of generic promotion funds is consistent with the enabling legislation and orders; to qualify State or regional dairy product promotion, research, or nutrition education programs (Qualified Programs); and to provide for evaluation of the effectiveness of both programs' advertising campaigns. USDA also assists the Boards in their assessment collection, compliance, and enforcement actions. Other USDA responsibilities relate to the nominating and appointing of Board members, amending the orders, conducting referenda, and conducting periodic program audits. USDA representatives attend full Board and Board committee meetings.

National Dairy Promotion and Research Board Oversight

NOMINATIONS AND APPOINTMENTS

The 36 members of the Dairy Board who administer the program serve 3-year terms, with no member serving more than two consecutive terms. Dairy Board members are selected by the Secretary of Agriculture from nominations submitted by producer organizations, general farm organizations representing other producers, Qualified Programs, or other interested parties.

Thirty-five nominations were received by USDA for the 12 Dairy Board members whose terms expired October 31, 2002. A press release issued on October 15, 2002, announced the appointment of six new members and six incumbents. All will serve 3-year terms ending October 31, 2005. Newly appointed members were: Lester E. Hardesty, Greeley, Colorado (Region 3); Cynthia R. Langer, Faribault, Minnesota (Region 5); William J. Herr, Greenwood, Wisconsin (Region 6); Pam Bolin, Clarksville, Iowa (Region 7); Michael M. Ferguson, Coldwater, Mississippi (Region 8); and Deanna S. Stamp, Marlette, Michigan (Region 9). Re-appointed to serve second terms were: John Zonneveld, Jr., Laton, California (Region 2); Neil A. Hoff, Windthorst, Texas (Region 4); Patricia M. Boettcher, Bloomer, Wisconsin (Region 6); Rita P. Kennedy, Valencia, Pennsylvania (Region 11); Audrey G. Donahoe, Frankfort, New York (Region 12); and Claude J. Bourbeau, St. Albans, Vermont (Region 13).

Lists of current Dairy Board members appear in **Appendix A-1**. **Appendix B-1** is a map of the contiguous 48 States depicting the 13 geographic regions under the Dairy Promotion and Research Order (Dairy Order).

FOREIGN AGRICULTURAL SERVICE

The Secretary of Agriculture has delegated oversight responsibility for all foreign market development activities outside the United States to the Foreign Agricultural Service (FAS) (7 CFR 2.43(a)(24)). FAS reviews the USDEC foreign market development plan and related export contracts. USDEC export contracts also are reviewed by AMS Dairy Programs to ensure conformance with the Dairy Production Stabilization Act of 1983 (Dairy Act) and Dairy Order and with established policies. The USDA's Foreign Market Access Program and the Market Promotion Program provided matching funds to USDEC for dairy product promotion and market research in Japan, Mexico, Southeast Asia, South Korea, and Latin America.

CONTRACTS

The Dairy Act and Dairy Order require that all contracts expending producer funds be approved by the Secretary (7 CFR 1150.140). During 2002, USDA reviewed and approved 172 Dairy Board and DMI agreements, amendments, and annual plans. Funding approvals were from the 1996, 1997, 1998, 1999, 2000, 2001, and 2002 fiscal periods. See **Appendix E** for the contractors and the initiatives approved by USDA during 2002.

CONTRACTOR AUDITS

During 2002, DMI retained the certified public accounting firm of KPMG Peat Marwick to audit the records of the following entities for projects in dairy foods research, media and advertising services, marketing research services, public relations services, and export (through USDEC): Southeast Dairy Research Center, Media Management Services Inc., J. Brown and Associates, Weber Shandwick, Inc., and Pacrim Associates, Ltd., respectively. DMI is implementing the audit recommendations for improving management and internal controls over contracts.

COLLECTIONS

The Dairy Act specifies that persons who pay producers and producers marketing milk directly to consumers, commonly referred to as "responsible persons," shall remit assessments to the Dairy Board or to Qualified Programs for milk produced in the United States and marketed for commercial use.

The Dairy Act provides that dairy farmers can direct up to 10 cents of their 15-cent per hundredweight assessment to Qualified Programs. During 2002, the Dairy Board received about 5.13 cents of the 15-cent assessment.

COMPLIANCE

Compliance by responsible persons in filing reports and remitting assessments continues in a timely manner and at a high rate. Only minor differences were discovered when comparing the audit results to what was reported by the responsible persons. The Dairy Board also verifies that the credits claimed by responsible persons are actually sent to Qualified Programs. This verification is done by contracts with each Qualified Program.

When noncompliance exists, the Dairy Board takes initial action on the matter. If the Dairy Board is unsuccessful in resolving the violation, the matter is referred to USDA for further action. In 2002, USDA assisted the Dairy Board in collecting approximately \$39,000 in delinquent assessments.

QUALIFIED PROGRAMS

USDA reviewed applications for continued qualification from 60 Qualified Programs. A list of the 60 active Qualified Programs is provided in **Appendix G**. In line with its responsibility for monitoring the Qualified Programs, USDA obtained and reviewed income and expenditure data from each of the Qualified Programs. The data reported from the Qualified Programs are included in aggregate form for 2001 and 2002 in **Tables 1-2** and **1-3**.

National Fluid Milk Processor Promotion Board Oversight

NOMINATIONS AND APPOINTMENTS

The 20 members of the Fluid Milk Board serve 3-year terms, with no member serving more than two consecutive terms. Fluid Milk Board members who fill vacancies with a term of 18 months or less are permitted to serve two additional 3-year terms. Fluid Milk Board members are selected by the Secretary from nominations submitted by fluid milk processors, interested parties, and eligible organizations. In a news release issued on June 5, 2003, the Secretary of Agriculture announced three reappointments, three appointments to a first term after filling a vacancy lasting less than 18 months, and one new appointment to the Fluid Milk Board. Reappointed to serve a second term were James W. Turner, Memphis, Tennessee (Region 9); Richard Walrack, City of Industry, California (Region 15); and Robert E. Baker, Omaha, Nebraska (At-Large Public). Appointed to serve their first full terms after filling a vacancy lasting less than 18 months were Michael F. Nosewicz, Cincinnati, Ohio (Region 3); William R. McCabe, Orrville, Ohio (Region 6); and Lawrence V. Jackson, Pleasanton, California (Region 12). Newly appointed to serve her first term was Susan D. Meadows, Dallas, Texas (At-Large Processor). The reappointed and newly appointed members were seated at the July 24–26, 2003, Fluid Milk Board meeting.

Five vacancies occurred on the Fluid Board due to company mergers and one resignation. The Fluid Milk Promotion Order provides that no company shall be represented on the Board by more than three representatives. The positions were vacated by Sylvia C. Oriatti, Rosemont, Illinois (Region 3); Alan L. Faust, Cincinnati, Ohio (Region 6); Michael H. Leb, Walnut Creek, California (Region 12); and Ann Puelz Ocana, Phoenix, Arizona (At-Large Processor). The vacancies were filled by Michael F. Nosewicz, Cincinnati, Ohio; William R. McCabe, Orrville, Ohio; Lawrence V. Jackson, Pleasanton, California; and Michael A. Krueger, Phoenix, Arizona, respectively.

A list of current Fluid Milk Board members appears in **Appendix A-2**. **Appendix B-2** shows a map depicting the 15 geographic regions under the Fluid Milk Promotion Order (Fluid Milk Order).

ORDER AMENDMENTS

The Farm Security and Rural Investment Act of 2002 (Farm Bill) contained some provisions that applied to the Fluid Milk Order. The changes became effective August 1, 2002, and related to fluid milk products processed and marketed commercially as of that date. The first change modified the definition of fluid milk products to be consistent with the definition provided in Federal Marketing Orders. The second change increased the exemption standard for fluid milk processors from 500,000 to 3,000,000 pounds of fluid milk products, processed and marketed in consumer-type packages in the 48 contiguous United States and the District of Columbia on a monthly basis, excluding those fluid milk products delivered to the residence of a consumer. In addition, the Farm Bill removed the Fluid Milk Order's termination (sunset) date of December 31, 2002, from the Fluid Milk Act. This did not require amending the Order.

PROGRAM DEVELOPMENT

The Fluid Milk Board contracted with the International Dairy Foods Association (IDFA) to manage the program. IDFA contracted with Bozell Worldwide, Inc., Siboney Inc., Weber Shandwick, Inc., and Flair Communications, Inc., to develop the Fluid Milk Board's teen advertising, Hispanic advertising and public relations, consumer education/public relations, and promotion programs, respectively.

CONTRACTOR AUDITS

The Fluid Milk Board retained the certified public accounting firm of Synder, Cohn, Collyer, Hamilton & Associates P.C. to audit the records of Bozell Worldwide, Inc., in order to determine if the agency had conformed to the financial compliance requirements specified in its agreement with the Board for the period of January 1, 2001, through December 31, 2001. The Board has worked with Bozell Worldwide, Inc., to resolve the issues noted in the compliance audit. The Board is continuously working to enhance its internal contract control system in order to ensure that the amounts invoiced to the Board are in compliance with established contracts and procedures.

COMPLIANCE

Compliance by fluid milk processors in filing reports and remitting assessments continues in a timely manner and at a high rate. During this fiscal period, no new cases of delinquent accounts have been referred to USDA.

CHAPTER 3

IMPACT OF GENERIC FLUID MILK AND DAIRY ADVERTISING ON DAIRY MARKETS: AN INDEPENDENT ANALYSIS

The Dairy Production and Stabilization Act of 1983 (Dairy Act; 7 U.S.C. 4514) and the Fluid Milk Promotion Act of 1990 (Fluid Milk Act; 7 U.S.C. 6407) require a yearly independent analysis of the effectiveness of milk industry programs. These promotion programs operate to increase milk awareness and thus the sale of fluid milk and related dairy products. From 1984 through 1994, USDA was responsible for the independent evaluation of the Dairy Program, as authorized by the Dairy Act, and issued an annual Report to Congress on the effectiveness of the Dairy Program. Beginning in 1995, the Congressional report began including third-party analyses of the effectiveness of the Dairy Program in conjunction with the National Fluid Milk Processor Promotion Program (Fluid Program) authorized by the Fluid Milk Act. While both programs utilize various types of marketing strategies to increase fluid milk and cheese consumption, this report focuses solely on media advertising impacts since advertising remains the most important marketing activity. The effects of fluid advertising under both programs are combined because the objectives of both programs are the same and data cannot be satisfactorily segregated to evaluate the two programs separately. An evaluation of the effectiveness of cheese advertising by the Dairy Program, however, is conducted separately.

Most economic models used to evaluate the effects of generic advertising programs over time measure the average impacts of various factors on demand. These "constant-parameter" models can be problematic when the time period covered is relatively long and/or the marketing environment has sufficiently changed over time. For example, this report is based on data since 1975; consequently, constant parameter demand models would estimate (among other variables) the effect of generic fluid milk and cheese advertising as an average point estimate over the 28-year period ending in 2002. In many instances, mean-response estimates are entirely appropriate; however, a mean-response model may not accurately convey the current degree of advertising effectiveness if sufficient changes have occurred in market environments, population profiles, and eating behavior over time. In addition, advertising messages have changed, two national programs have been instituted more than a decade apart, and State and regional programs have become more coordinated since the inception of the generic advertising programs.

An alternative approach to measuring the impacts of advertising, given a long history of time series data, is to use a "time-varying parameter" model. This type of model measures how the impact of demand factors, including generic advertising, varies over time. Similar to the approach of last year, this year's economic study adopts such a model and, consequently, examines how the effectiveness of generic fluid milk and cheese advertising has changed over time. The model also is able to identify important factors that have influenced the changes in advertising effectiveness over time.

In order to simulate the impacts of generic advertising over time, the retail demand impacts must be measured along with other appropriate processor and farm market supply-side responses. The model used is unique in its level of disaggregation of the U.S. dairy industry. For instance, the dairy industry is divided into retail, wholesale (processing), and farm markets, and the retail and wholesale markets include fluid milk and cheese separately. The model simulates market conditions with and without the Dairy and Fluid Programs.

The following summarizes the findings of the report. Copies of the complete evaluation report may be obtained from Cornell University, USDA, Dairy Management Inc. (DMI), the National Dairy Promotion and Research Board, or the National Fluid Milk Processor Promotion Board.

HIGHLIGHTS

Generic fluid milk and dairy product advertising conducted under the Dairy and Fluid Programs had a major impact on dairy markets. Over the period 1998–2002, on average, the following market impacts would have occurred if the advertising under the Fluid Program had not been in effect, and advertising under the Dairy Program was equal to its level the year prior to the enactment of that national mandatory program:

- Fluid milk consumption would have averaged 4.3 percent lower annually.
- Cheese consumption would have averaged 1.2 percent lower annually.
- Total consumption of milk in all dairy products would have averaged 1.9 percent lower annually, or roughly 3.2 billion pounds on a milkfat equivalent basis.
- The average price received by dairy farmers would have averaged 8.2 percent, or \$1.14 per hundredweight, lower annually.
- Commercial milk marketings by dairy farmers would have averaged 1.9 percent lower annually.

Over the same period, the following market impacts would have occurred if the Dairy Program was not in existence but the Fluid Program was, and advertising expenditures by dairy farmers were equal to the level that existed the year prior to enactment of the Dairy Program:

- Fluid milk consumption would have averaged 0.9 percent lower annually.
- Cheese consumption would have averaged 1.7 percent lower annually.
- Total milk consumption of all dairy products would have averaged 1.0 percent lower annually, or roughly 1.7 billion pounds on a milkfat equivalent basis.

¹ It is important to note that there was generic milk and cheese advertising conducted by some states prior to passage of the Dairy Production and Stabilization Act of 1983, which authorized the Dairy Program. As such, to measure the advertising impacts of the Dairy Program, this study simulated and compared market conditions with the Dairy Program versus market conditions reflecting advertising funding levels prior to when the Dairy Program was enacted. Throughout this report, any scenario referring to the absence of the Dairy Program reflects advertising funding at levels prior to enactment of the Dairy Program.

- The average price received by dairy farmers would have averaged 4.0 percent, or \$0.51 per hundredweight, lower annually.
- Commercial milk marketings by dairy farmers would have been 1.0 percent lower annually.
- The average benefit-cost ratio for the Dairy Program was 8.69, i.e., each dollar invested in fluid milk and cheese advertising returned \$8.69 in revenue to dairy farmers on average.

FACTORS AFFECTING THE DEMAND FOR FLUID MILK AND CHEESE

Because there are many factors that influence the demand for fluid milk and cheese besides advertising, an econometric model was used to identify the effects of individual factors affecting the demand for these products. The following variables were included as factors influencing per capita fluid milk demand: the Consumer Price Index (CPI) for fluid milk, the CPI for nonalcoholic beverages used as a proxy for fluid milk substitutes, per capita disposable income, the percentage of the U.S. population less than 6 years old, the percentage of the U.S. population that is African American, variables to capture seasonality in fluid milk demand, a trend variable to capture changes in consumer tastes for fluid milk over time, expenditures on branded fluid milk advertising, and expenditures on generic fluid milk advertising. The following variables were included as factors influencing per capita cheese demand: the CPI for cheese, the CPI for meat used as a proxy for cheese substitutes, per capita disposable income, per capita food away from home (FAFH) expenditures, the percentage of the U.S. population that is ethnically Hispanic or Asian, the percentage of the U.S. population between 20 and 44 years old, variables to capture seasonality in cheese demand, a trend variable to capture changes in consumer tastes for cheese over time, expenditures on brand cheese advertising, and expenditures on generic cheese advertising.

The model was estimated with national quarterly data from 1975 through 2002. To account for the impact of inflation, all prices and income were deflated. Branded and generic fluid milk and cheese advertising expenditures were deflated by a media cost index computed from information supplied by DMI on annual changes in advertising costs by media type. Because advertising has a carry-over effect on demand, past advertising expenditures were included as explanatory variables using a distributed-lag structure.

Unlike constant-parameter models, which measure the average impact of each of the above factors on milk and cheese demand, the time-varying parameter model used in this report measures each demand factor's impact on a quarterly basis. Moreover, the model identifies the factors that were most important to the variation of advertising response over time. The model allows measurement of the magnitude of each factor influencing demand, how that magnitude has changed, and what has impacted on this change over time. The generic advertising parameter estimates are compared across both time and products.²

² While the general specification of the retail demand models are equivalent to those in last year's report, some changes in the data are worthy of note. The data provided by USDA included a historical updating of numerous variables, particularly for food expenditures. The results here reflect the most recent data available.

The relative impacts of variables affecting demand can be represented with what economists call "elasticities." Elasticities measure the percentage change in per capita demand given a 1.0 percent change in one of the identified demand factors. **Table 3-1** provides selected average elasticities over the most recent 5-year period. For example, the price elasticity of demand for cheese equal to -0.288 means that a 1.0 percent increase in the real, inflation-adjusted, cheese price decreases per capita cheese quantity demanded by 0.288 percent.³

While **Table 3-1** presents these elasticities evaluated over the most recent 5-year time period, the forthcoming discussion will also elaborate on how these elasticities were estimated to have varied over time. Although the principal focus of this report is on generic advertising elasticities for fluid milk and cheese, we also provide some exposition of time-varying responses for selected demand variables.

Fluid Milk

Based on the computed elasticities (**Table 3-1**), the primary factors influencing per capita fluid milk demand are: (1) the percentage of the population under 6 years of age, (2) the per capita disposable income, and (3) the percentage of the population that is African American. The relative amount of variation in these elasticities over time differs by demand factor. The demand response to changes in real prices has been consistently inelastic; i.e., consumers are relatively insensitive to changes in price. Given the nature of the product as a staple, this is expected. The change in estimated elasticities has increased from -0.050 early in the sample time period to a peak of around -0.100 in the early 1990s. Modest reductions have occurred since with a 5-year average of -0.085 (**Figure 3-1**). The implication of price elasticities all at or below -0.100 implies that fluid milk demand has consistently been largely insensitive to real price changes over time, which is a result consistent with the majority of empirical studies of fluid milk demand.

Income elasticities have shown relatively strong growth early in the sample time period but have been modestly declining over the last few years and currently are similar to estimated levels for cheese (**Figure 3-2**). The current income elasticity estimate for fluid milk is slightly below the 5-year average estimate of **Table 3-1**. For example, in 2002, a 1.0 percent increase in disposable (inflation-adjusted) income resulted in an average 0.540 percent increase in per capita fluid milk demand.

While the youngest-age cohort in the United States still remains a very important factor affecting fluid milk demand, reductions in elasticity estimates have decreased from approximately 1.200 in 1994 to a current value of approximately 0.720 (**Figure 3-3**). The 5-year mean-response estimate of 0.815 in **Table 3-1** also is indicative of the historically stronger demand component from this young age cohort. The current elasticity estimate implies that for every 1.0 percent decline in the proportion of the U.S. population under the age of six, there is a 0.720 percent decrease in per capita fluid milk demand (**Figure 3-3**).

³ Relative to last year's report, most notable changes in mean elasticity estimates occurred for price (lower) and race (higher) effects. Price and income elasticities for cheese did not indicate the upward trend as estimated last year, due mostly to substantial changes in the food expenditure data. Trends for race and age effects were quite similar; however, some shifts in the magnitude from age to race did occur.

Lower per capita fluid milk demand of African Americans relative to the rest of the population is well recognized. The demand elasticity in **Table 3-1** indicates that a 1.0 percent increase in the proportion of the population that is African American has resulted in an average decrease in per capita fluid milk demand of -0.320; however, the statistical significance is somewhat lower. Modest reductions in the impact of this factor have occurred since the mid-1990s, offsetting some the gains in its impact through the 1980s (**Figure 3-4**). The current demand elasticity of approximately -0.292 for this cohort proportion is similar to the 5-year mean estimate from **Table 3-1**.

Cheese

Returning to the 5-year mean-response demand elasticities of **Table 3-1**, it appears the primary factors influencing per capita cheese demand include: (1) the percent of the population that is ethnically Hispanic or Asian, (2) per capita disposable income, (3) the retail cheese price, (4) the percent of the population that is 20–44 years of age, and (5) per capita expenditures on FAFH. Price elasticity for cheese has shown a declining trend over time, indicating that consumers are becoming somewhat less responsive to changes in price; however, elasticity estimates are still well above those estimated for fluid milk. The mean response estimate of –0.288 in **Table 3-1** can be compared with levels around –0.350 in the late 1980s and –0.400 in the late 1970s (**Figure 3-1**). The current price elasticity of demand is approximately –0.296; i.e., a 1.0 percent increase in the real cheese price results in a 0.296 percent decrease in per capita cheese disappearance. As **Figure 3-1** demonstrates, the margin between the levels of price response between fluid milk and cheese over time has decreased from around 0.36, early in the sample time period, to around 0.22 currently.

Demand for cheese is relatively responsive to changes in per capita disposable income. Five-year response estimates indicate that a 1.0 percent increase in real per capita disposable income will increase per capita cheese demand by 0.558 percent (**Table 3-1**). Relative to fluid milk, income elasticities for cheese have been less variable (**Figure 3-2**). In fact, the gradual downward trend in income elasticities for cheese, combined with the increasing trend for fluid milk early in the sample period, has resulted in income elasticity estimates that are roughly equivalent for the two products currently. Stronger levels of income response, e.g., to that of price, may be indicative of gains in disappearance from purchases of more value-added products, relative to reactions to price changes of products in general. While still inelastic, relatively strong income elasticities for fluid milk and cheese are intuitively attractive to future changes in per capita disappearance as real income levels have continued to rise.

As hypothesized, the middle-aged population cohort (ages 20 through 44) was shown to be positively correlated with per capita cheese disappearance (0.271), though with a somewhat lower level of statistical significance (**Table 3-1**). However, the time-varying results do demonstrate continued modest gains in this cohort effect over time (**Figure 3-3**).

⁴ The level of significance can generally be interpreted as a confidence measure. For example, at the 10 percent significance level, we are 90 percent confident (100-10) that the estimate is statistically different from zero. As such, the lower the significance level, the higher the degree of confidence in the empirical estimates.

The impact of changes in the ethnic Hispanic or Asian population was strongly correlated with increases in per capita cheese disappearance. On average, a 1.0 percent increase in percent of the population identified as Hispanic or Asian increased per capita cheese disappearance by 0.796 percent over the past five years (**Table 3-1**). The relatively high recent estimates are due, in part, to the consistently strong growth in this cohort population since 1990 positively impacts overall per capita disappearance (**Figure 3-4**).

Given that approximately two-thirds of national cheese disappearance is consumed in sectors away from home, it is not surprising that per capita expenditures on FAFH are related to commercial per capita cheese disappearance. On average, a 1.0 percent increase in per capita expenditures on FAFH resulted in a 0.112 percent increase in cheese demand over the last five years (**Table 3-1**). The positive contribution to per capita disappearance is largely captured by cheese usage in restaurants, particularly in fast-food businesses with burger, taco, and pizza products. The overall impact of FAFH expenditures to per capita cheese disappearance has been decreasing due, in part, to a flattening of real per capita FAFH expenditures since the early 1990s.

Branded advertising expenditures for both fluid milk and cheese did not significantly contribute to total per capita disappearance. While any advertising objective includes increasing sales, branded advertising efforts heavily concentrate their efforts on gaining market share from their competitors. Branded fluid milk advertising expenditures are relatively small compared to their generic counterparts; however, cheese has considerably more branded advertising expenditures. In any event, neither demand model exhibited a response on total per capita disappearance that was significantly different from zero.

While branded advertising efforts did not demonstrate significant impacts on overall demand, generic advertising was positive and significant for both fluid milk and cheese demand (**Table 3-1**). Five-year average generic advertising elasticities for fluid milk and cheese show only a modest difference (0.041 for fluid milk and 0.038 for cheese); however, elasticity estimates for both products show substantial variation over time (**Figure 3-5**). Generic advertising elasticities for cheese, in particular, have shown reasonably strong growth overtime, while strong gains in fluid milk advertising response through the early 1990s have been largely offset by reductions in the latter half of the 1990s.⁵

Both products demonstrated significant increases in generic advertising elasticities up to the early to mid - 1990s. However, since 1992, fluid milk generic advertising elasticities have shown a decreasing trend, albeit a relatively flat one, since 1997 (**Figure 3-5**). With the exception of two more pronounced spikes in 1994 and 1999, generic cheese advertising elasticities have gradually trended upwards over the entire sample

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⁵ It is hypothesized that advertising of pizza and cheeseburgers has a positive effect on the consumption of cheese. Such variables were not included in the model due to a lack of data. Assuming pizza and cheeseburger advertising has a significantly positive effect on cheese consumption, omission of these variables could result in the impact of generic cheese advertising's being somewhat overstated.

period and ranged from 0.005 to 0.041. While the increase in 1999 (due mostly to an abrupt increase of the population proportion of Hispanics or Asians in the data) was not statistically significant, the increase in 1994 was significant and reflects the first (and sizable) decrease in real per capita FAFH expenditures.⁶ Currently, the generic advertising elasticity for cheese is approximately 0.037.

Fluid milk generic advertising elasticities increased from around 0.025 at the beginning of the sample period to 0.058 in 1992. Growth in advertising elasticities over this time was due in large part to strong gains in the population proportion of the youngest age cohort, a strong demand component and a primary marketing target (including parents of young children) of the advertising programs. Reductions in the mid- to late 1990s reflect, in large part, reductions in this cohort's population proportion over time. Currently, the fluid milk generic advertising elasticity is 0.041.

It is clear that the historical gap between the generic advertising elasticities for the two products is no longer currently apparent. Previous constant-parameter studies have consistently shown generic advertising elasticities for cheese demand below that for fluid milk demand. Average estimates of the time-varying response levels here over the entire sample period would be consistent with those results. Statistical tests were performed to see what differences in estimates are significantly different from zero across products and across time since 1990; we summarize those results here.

First, we compare whether the fluid milk and cheese generic advertising elasticities are statistically different. Comparing the differences in elasticities since 1990, the large gap that existed from 1990–1996 statistically holds up; i.e., fluid milk generic advertising elasticities were statistically above their cheese counterparts. Since 1997, however, the levels of generic advertising response between fluid milk and cheese are not statistically different from one another.

Now we compare how significant changes in the levels of elasticities are for both products over time. In general, while more recent changes in advertising response (i.e., since 1995 for fluid milk, and since 1994 for cheese) are not statistically different from one another, clear differences exist between response levels earlier in the 1990s compared to those in the latter half of the 1990s and more recently.

Generic advertising elasticities for fluid milk began to drop significantly by 1994. However, in 1995 real fluid milk advertising expenditures, while offset some by shifts to generic cheese advertising, increased with the addition of advertising expenditures from the milk processor MilkPEP program. Since that time, the changes in fluid milk advertising response have flattened out considerably, and in fact, the visual decline

⁶ Recall that the econometric model hypothesizes that changes in market and demographic environments will affect the level of response to generic advertising activity. The relative change in generic advertising response will then depend on both the signs and relative sizes of parameter estimates that serve to track the relation of such impacts, as well as changes in the levels of the market and demographic variables themselves. We highlight briefly some of the contributing factors here in relation to Figure 3-4, with a further discussion later in this report identifying the important factors affecting changes in generic advertising response over time.

evident from **Figure 3-5** since 1995 is not statistically significant. Generic cheese advertising elasticities have shown strong growth since 1990 and, while changes since 1994 are not statistically significant, there exist significant differences since the beginning of the decade.

FACTORS AFFECTING GENERIC ADVERTISING EFFECTIVENESS

Allowing advertising response to vary over time is important, but knowing what factors contributed to that variation, and by how much, provides valuable information for crafting future strategies, changing the advertising focus, or altering preferred target audiences. The model used in this study allows not only for advertising response to vary over time, but also provides information on the relative importance of factor variability that determines changes in advertising response levels.

We can define these impacts mathematically from the time-varying parameter model specification, and we refer to them as generic advertising response elasticities (GARE). That is, we can derive the percentage change in the long-run generic advertising elasticity with respect to a change in the level of the variable. For example, how are generic advertising elasticities affected by changes in real income or by changes in food expenditure patterns? The signs of the GARE provide useful information for product marketers in crafting future market strategies.

Average GARE since 1998 are presented in **Table 3-2**. Relative to the other variables, GARE with respect to price are low and not significant. The positive sign on the cheese estimate would seem to contradict advertising and marketing theory which generally concludes that advertising is more effective during price promotion periods. It is more likely the case that this characteristic cannot be gleaned from these results given the aggregate nature of the data at hand. In any event, neither estimate is significantly different from zero.

Changes in the proportion of the population under age 6 and the real per capita income have primarily driven changes in the level of fluid milk generic advertising response. The positive demand relationship for the young age cohort indicates this group consumes more fluid milk per capita, and the positive GARE indicates that this cohort (or parents of this cohort) is also more responsive to the advertising messages. This result is consistent with current advertising efforts aimed at young children, and it follows, then, that strategies targeting this cohort would be an effective approach to increase advertising response.

The positive sign on the income variable for fluid milk also provides evidence that targeting middle- to upper-income households may be beneficial (**Table 3-2**). The income effect was negative for cheese, although the estimate was not significantly different from zero. The negative effect for cheese may also be related to changes in eating behavior as incomes rise, such as purchasing more prepared or ready-to-eat

foods or eating more food away from home--areas not primarily targeted in past generic advertising messages.

The negative demand impact from African Americans appears reinforced with a lower level of advertising responsiveness, although the result does not appear to be statistically significant (**Table 3-2**). This direct relationship between demand and advertising response impacts is also reinforced with the Hispanic/Asian variable for cheese. The Hispanic/Asian population proportion has increased over 9 percent since 1998, and it appears that this segment of the population is more responsive to the advertising message. Targeting this race cohort would seem an effective strategy to increase the level of generic cheese advertising response.

The direct relationship between demand response and advertising response does not appear to hold for households consuming cheese away from home; i.e., as consumers spend more on food eaten away from home, generic cheese advertising elasticities fall (**Table 3-2**). While a large share of cheese disappearance is in the FAFH sector, nearly all generic cheese advertising is focused on at-home consumption. As such, it is reasonable to expect that as consumers spend more of their budget away from home, the current generic cheese advertising message becomes less effective. If per capita FAFH expenditures are expected to increase in the future, then shifting generic cheese advertising toward the away-from-home market may be appropriate.

IMPACT OF THE DAIRY AND FLUID MILK ADVERTISING PROGRAMS

To evaluate market impacts of the Dairy and Fluid advertising programs, the economic model was simulated over a 5-year time period from 1998 through 2002. These two programs are complementary in that they share a common objective: to increase fluid milk sales. To accomplish this objective, both programs invest in generic fluid milk advertising, which is different from brand advertising in that the goal is to increase the total market for fluid milk rather than a specific brand's market share. In the evaluation of the programs, it is assumed that a dollar spent on fluid milk advertising by dairy farmers has the same effect on demand as a dollar spent by processors on fluid milk advertising, since both programs have an identical objective. The Dairy Program additionally has an objective to expand the market for cheese. Accordingly, part of its budget is directed to generic cheese advertising.

To examine the impacts that the two advertising programs had on the markets for fluid milk and cheese over this period, the economic model was initially simulated under two scenarios based on the level of generic advertising expenditures: (1) a baseline scenario, where generic advertising levels were equal to actual generic advertising expenditures under the two programs, and (2) a no-national program scenario, where there was no fluid milk processor-sponsored advertising, and dairy farmer-sponsored advertising was reduced to 42 percent of actual levels to reflect the difference in assessment before and after the national program was enacted. A comparison of these two scenarios provides a measure of the combined impacts of the two programs.

Table 3-3 presents the annual averages for supply, demand, and price variables over the period 1999–2002 for the two scenarios. Generic advertising by the Dairy and Fluid Programs has had a positive impact on fluid milk consumption over this period. Specifically, fluid milk consumption would have been 4.3 percent lower had the two advertising programs not been in effect. Likewise, generic cheese advertising under the Dairy Program had a positive impact on cheese consumption, i.e., consumption would have been 1.2 percent lower without generic advertising. Consumption of milk used in all dairy products would have been 1.9 percent lower had these two programs not been in effect.

Generic advertising by dairy farmers and milk processors had an effect on the farm milk price and milk marketings. The simulation results indicate that the all-milk price would have been \$1.14 per hundredweight lower without generic advertising provided under the two programs. The farm milk price impacts resulted in an increase in farm milk marketings. That is, had there not been the two advertising programs, farm milk marketings would have been 1.9 percent lower due to the lower milk price.

A third scenario was subsequently simulated to measure the market impacts of the advertising program supported by the 15-cent checkoff program by dairy farmers. This scenario assumes that the advertising program operated by the fluid milk processors is still in effect. As in the earlier scenario, advertising expenditures by dairy farmers were reduced to 42 percent of actual levels to reflect the situation prior to the enactment of the Dairy Program. A comparison of this third scenario with the baseline scenario gives a measure of the advertising market impacts of the current mandatory Dairy Program.

The last two columns of **Table 3-3** present the results of this scenario. Had there not been fluid milk and cheese advertising sponsored by dairy farmers, fluid milk demand would have been 0.9 percent lower, cheese demand would have been 1.7 percent lower, and total milk demand would have been 1.0 percent lower than it actually was. Advertising under the Dairy Program also had a significant impact on the farmer milk price. The simulation results indicate that the all-milk price would have been \$0.59 per hundredweight lower without generic advertising by the Dairy Program. Finally, farm milk marketings would have been slightly lower (1.0 percent) in the absence of the Dairy Program. **Table 3-4** presents a description of variables used in the econometric model.

BENEFIT-COST OF ADVERTISING BY THE DAIRY PROGRAM

One way to measure whether the benefits of a program outweigh the cost is to compute a benefit-cost ratio (BCR). A BCR can be computed as the change in net revenue due to advertising divided by the cost of advertising. While a BCR for producers can be estimated for the Dairy Program, it cannot be computed at this time for milk processors with the Fluid Program because data on packaged fluid milk wholesale prices, which is necessary in calculating processor net revenue, are proprietary information and not available.

The BCR for the Dairy Program was calculated as the change in dairy farmer net revenue (what economists call "producer surplus") due to demand enhancement from advertising under the Dairy Program divided by

the advertising costs. The demand enhancement reflects increases in quantity and price as a result of the advertising program. As such, costs allocated to the enhancement represent advertising costs. Since advertising expenditures in the model only represent airtime, print space, and other direct media costs, it is necessary to incorporate expenses that reflect general administration, overhead, and advertising production costs in order to reflect the true complete costs of the advertising program supported by the checkoff. Following conversations with staff at DMI and a review of Dairy Program budgets, direct media expenditures were prorated upward by a factor of 1.25. The results show that the average BCR for the Dairy Program was 8.69 from 1998 through 2002. This means that each dollar invested in generic fluid milk and cheese advertising by dairy farmers during the period returned \$8.69, on average, in net revenue to farmers.

Another way to interpret this figure is as follows. The increase in generic advertising expenditures resulting from the enactment of the Dairy Program cost dairy producers an additional \$61 million per year on average (i.e., the difference between \$125 million annually under the baseline scenario and \$64 million under the no Dairy Program scenario). The additional fluid milk and cheese advertising resulted in higher milk demand, milk prices, and net revenue for dairy producers nationwide. Based on the simulations conducted with the economic model, it is estimated that the average annual increase in producer surplus (reflecting changes in both revenues and costs) due to the additional advertising under the Dairy Program was \$530 million. Dividing \$530 million by the additional advertising costs of \$61 million results in the BCR estimate of 8.69.

The level of this BCR suggests that the generic advertising program supported by dairy farmers has been a successful investment. Questions often arise with respect to the accuracy of these return estimates, especially in relation to recent low commodity prices and financial stresses faced by producers. BCRs are generally large because advertising expenditures in relation to product value are small and, as such, only a small demand effect is needed to generate positive returns. For example, the change in advertising expenditures above is less than 0.5 percent of the value of farm milk marketings. Here, an increase in generic advertising increased producer net returns by over \$500 million per year, but still represents only about 2 percent of the value of farm milk production. The advertising activity resulted in modest gains in total fluid milk utilization and had a positive effect on milk prices, resulting in positive net returns to the advertising investment for dairy farmers. While the positive price effects were not sizable enough to sufficiently counter recent low prices received by dairy farmers, generic advertising did improve demand and prices to dairy farmers relative to a nonadvertising scenario and provided a net return on the investment to clearly support the advertising activity.

Table 3-1. Average Elasticity Values (1998–2002) for Factors Affecting the Retail Demand for Fluid Milk and Cheese ¹

| Demand Factor | Fluid Milk | Cheese |
|---|------------|----------|
| Retail Price | -0.085** | -0.288** |
| Per capita income | 0.576** | 0.558** |
| Per capita food away from home expenditures | n.a. | 0.112** |
| Percent of population age < 6 | 0.815** | n.a. |
| Percent of population age 20–44 | n.a. | 0.271* |
| Percent of population African American | -0.320* | n.a. |
| Percent of population Hispanic/Asian | n.a. | 0.796** |
| Generic advertising | 0.041** | 0.038** |

¹ Example: A 1.0 percent increase in the retail price of cheese is estimated to reduce per capita sales of cheese by 0.288 percent. Note: n.a. means not applicable. For more information on the data used to estimate these elasticities, see Table 3-4.

^{*} Statistically significant at the 15% significance level.

^{**} Statistically significant at the 10% significance level or less.

Table 3-2. Average Generic Advertising Response Elasticities (GARE), 1998–2002¹

| Variable | Fluid Milk GARE | Cheese GARE |
|---|--------------------|----------------|
| Retail price | -0.534 | 1.233 |
| Per capita income | 3.896* | -3.412 |
| Per capita food-away-from-home expenditures | n.a. | -9.361* |
| Percent of population under 6 years of age | 6.661* | n.a. |
| Percent of population 20-44 years of age | n.a. | 3.096 |
| Percent of population African American | -2.396 | n.a. |
| Percent of population Hispanic/Asian | n.a. | 8.221* |

¹ Interpreted as the percentage change in the long-run generic advertising elasticity for a one-percentage unit change in the associated variable.

^{*} Significant at the 10% significance level or less.

Table 3-3. Simulated Impacts of the Dairy and Fluid Milk Programs on Selected Market Variables, Annual Average 1999–2002

| | | Baseline Scenario ¹ | No National Program Scenario ² | | No Dairy Program Scenario ³ | |
|---------------------------------|-------------|--------------------------------|---|--------------|--|--------------|
| Market Variable | Unit | Level | Level | % Difference | Level | % Difference |
| Fluid Milk Demand | Bil lbs | 55.3 | 52.9 | -4.3 | 54.8 | -0.9 |
| Cheese Demand | Bil lbs MFE | 69.1 | 68.3 | -1.2 | 67.9 | -1.7 |
| Total Dairy Demand | Bil lbs | 162.5 | 159.3 | -1.9 | 160.8 | -1.0 |
| Basic Formula Price | \$/cwt | 11.98 | 11.28 | -5.8 | 11.47 | -4.2 |
| All Milk Price | \$/cwt | 13.84 | 12.70 | -8.2 | 13.29 | -4.0 |
| Milk Marketings | Bil lbs | 164.6 | 161.4 | -1.9 | 162.9 | -1.0 |
| Benefit-Cost Ratio ⁴ | \$ per \$1 | | | | 8.69 | |

¹ Baseline scenario reflects the current operation of the Dairy and Fluid Milk Programs.

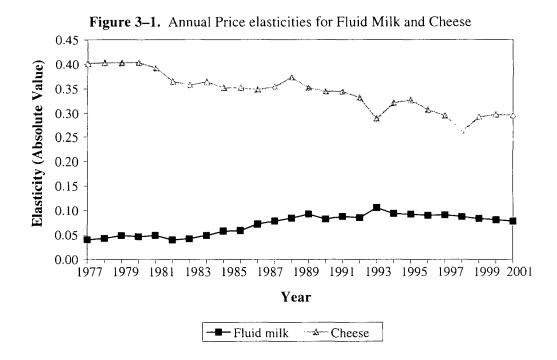
² No National Program Scenario reflects no Fluid Milk Program and Dairy Program advertising at prenational program spending levels.

³ No Dairy Program Scenario reflects current Fluid Milk Program and Dairy program advertising at prenational program spending levels.

⁴ Benefit-cost ratio computed for the Dairy Program only.

Table 3-4. Description of Variables Used in Econometric Model.¹

| Variable | Description | Units | Mean ² |
|----------------|---|---------------|-------------------|
| DEDDC | Consumption Variables | lhe MEE | 49.06 |
| RFDPC | Quarterly retail fluid demand per capita | lbs. MFE | (1.36) |
| RCDPC | Quarterly retail cheese demand per capita | lbs. MFE | 61.27 |
| (CDI C | Quarterly retain eneese demand per capital | 103. MI E | (3.00) |
| RBDPC | Quarterly retail butter demand per capita | lbs. MFE | 24.28 |
| | Commonly common processing | | (2.88) |
| RFZDPC | Quarterly retail frozen demand per capita | lbs. MFE | 12.41 |
| | - , | | (2.01) |
| FMS | Quarterly fluid milk production | bil. lbs. | 41.14 |
| | | | (1.44) |
| | Prices and Price Indices | | |
| RFPBEV | Consumer retail price index for fresh milk and cream, deflated by | # | 1.15 |
| | consumer price index for nonalcoholic beverages (1982–84=100) | | (0.04) |
| RCPMEAT | Consumer retail price index for cheese, deflated by consumer | # | 1.05 |
| | retail price index for meats (1982–84=100) | | (0.03) |
| VFP | Wholesale fluid price index (1982–84=100) | # | 1.49 |
| ···on | | A (1) | (0.07) |
| VCP | Wholesale cheese price | \$/lb. | 1.36 |
| AVV | Paris francis | ¢1 | (0.23) |
| ИW | Basic formula price | \$/cwt. | 11.98 |
| ΛMP | All milk price | \$/cwt. | (2.27) 13.84 |
| Alvii | All milk price | Φ/CWL. | (1.77) |
| DIFF | Class I differential | \$/cwt. | 3.47 |
| JII 1 | Class I differential | Φ/CWL. | (1.83) |
| PFE | Producer energy index (1982–84=100) | # | 1.04 |
| | (1902 of 190) | | (0.14) |
| | Demographic Variables | | |
| NCPC | Per capita disposable income, deflated by the consumer retail | \$000 | 14.57 |
| | price index for all items (1982–84=100) | | (0.38) |
| BLACK | Percent of the population African American | # | 12.02 |
| | | | (0.09) |
| HISPANIC/ASIAN | Percent of the population Hispanic/Asian | # | 4.81 |
| | | | (0.16) |
| AGE5 | Percent of the population under age 6 | # | 6.89 |
| | | | (0.09) |
| GE2044 | Percent of the population age 20 to 44 | # | 36.49 |
| . EUDO | | • | (0.61) |
| FAFHPC | Real per capita food away from home expenditures (1988\$) | \$ | 241.55 |
| | 41 21 12 14 | | (4.62) |
| TEAD. | Advertising Expenditures | ¢:1 | 24.00 |
| GFAD | Quarterly generic fluid milk advertising expenditures, deflated by | \$mil | 34.99 |
| SEAD DMI | Media Cost Index (2001=100) Quarterly generic fluid milk advertising expenditures, Dairy | ¢mil | (8.67) 17.56 |
| GFAD_DMI | Program, deflated by Media Cost Index (2001=100) | \$mil | |
| GFAD_MILKPEP | Quarterly generic fluid milk advertising expenditures, Fluid Milk | \$mil | (10.06) 17.43 |
| DI AD_IMILATEL | Program, deflated by Media Cost Index (2001=100) | фии | (5.38) |
| GCAD | Quarterly generic cheese advertising expenditures, Dairy | \$mil | 13.71 |
| | Program, deflated by Media Cost Index (2001=100) | фини | (2.59) |
| BFAD | Quarterly brand fluid milk advertising expenditures, deflated by | \$mil | 5.93 |
| | Media Cost Index (2001=100) | 411111 | (3.03) |
| BCAD | Quarterly brand cheese advertising expenditures, deflated by | \$mil | 22.07 |
| | Media Cost Index (2001=100) | • | (10.52) |
| | bles (Q1-Q3) are also included in the model to account for seasonality in | | |



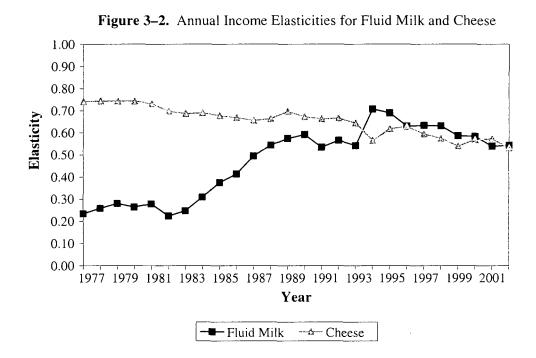


Figure 3–3. Annual Age Composition Elasticities for Fluid Milk and Cheese

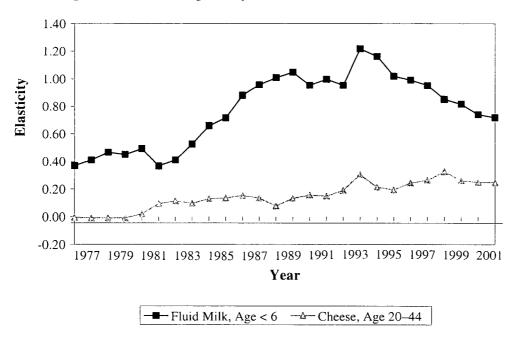
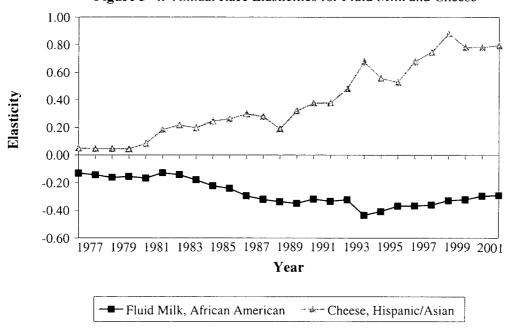
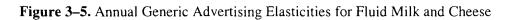
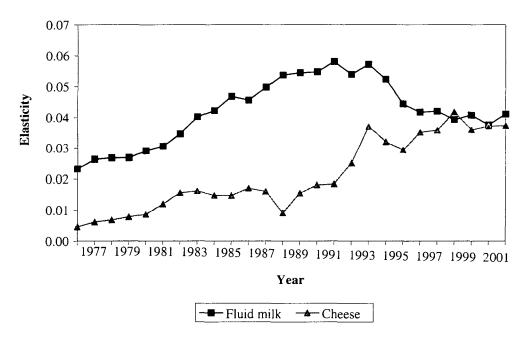


Figure 3-4. Annual Race Elasticities for Fluid Milk and Cheese







CHAPTER 4

FLUID MILK MARKET AND PROMOTION ASSESSMENT

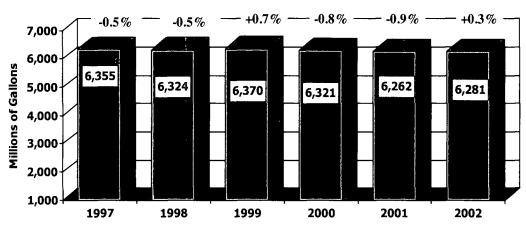
For the fourth consecutive year, Beverage Marketing Corporation (BMC) has been commissioned by Dairy Management Inc. (DMI) and the National Fluid Milk Processor Promotion Board to review the generic fluid milk advertising and promotional programs. This review offers a subjective evaluation of the effectiveness of those programs. BMC evaluates milk's position relative to milk's competitive beverage set — its respective marketing efforts and market performance. BMC believes milk's competitive set includes most non-alcoholic refreshment beverages, specifically carbonated soft drinks, bottled water, fruit beverages, ready-to-drink teas, and sports beverages. This year BMC examines both the overall milk industry's performance as well as the effect that targeted advertising and promotion have had on milk consumption by the crucial demographic cohorts. The following summarizes our findings based on the analysis of available data.

BMC'S ASSESSMENT OF CURRENT MILK INDUSTRY ENVIRONMENT

In 2002, fluid milk volume increased after two years of significant decline. Milk volume gained close to 20 million gallons, or 0.3%. Over the prior two years, the milk market had decreased by a total of 108 million gallons, down 0.8% in 2000 and 0.9% in 2001. The increase in milk volume in 2002 is noteworthy because it was the first positive movement in three years. The history of volume changes for fluid milk sales over the past six years is shown in **Figure 4-1**. Milk's compound annual growth rate (CAGR) for the 5-year period 1997 to 2002 was -0.2%, an improvement from the prior five-year period (1996-2001) when CAGR was -0.3%.

Fluid Milk Sales Volume* and Growth 1997 – 2002





* In millions of gallons

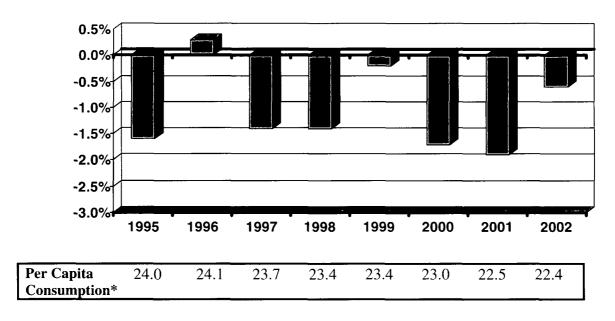
Source: Beverage Marketing Corporation; USDA



For the last 30 years, total fluid milk volume has remained within a somewhat narrow range, between 6.2 and 6.4 billion gallons, with slight fluctuations up and down. Generally, milk volume has been flat. However, with steady population growth, milk per capita consumption has been decreasing over time. Despite positive volume growth for milk in 2003, per capita consumption declined once again, down 0.6%. See **Figure 4-2**. However, BMC continues to believe that fluid milk per capita consumption declines and volumetric trends would have been greater without the effect of the national generic fluid milk advertising and promotional programs. While the Cornell University econometric model was unavailable for this analysis, preliminary indications suggest a return to positive growth in the benefit/cost ratio of advertising and marketing spending, supporting BMC's belief.

Figure 4-2

Per Capita Consumption Percentage Change
1995 - 2002



* In gallons

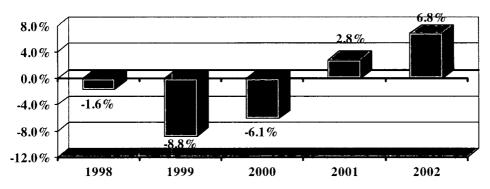
Source: Beverage Marketing Corp., USDA

While the overall milk per capita consumption rates continue to decline, there has been positive movement in one of the most important age group targets for milk, namely teens. After declining significantly each year for several years, per capita consumption of milk for 13- to 17-year-olds has increased for two consecutive years, a likely consequence of expanded, targeted programs against this critical demographic cohort. **Figure 4-3** shows the five-year trend in teen per capita consumption changes.



Figure 4-3

Change in Per Capita Milk Consumption – 13 to 17 Year-Olds 1998 - 2002



Source: Beverage Marketing Corp.; SIP

The data of **Figure 4-4** compares the per capita consumption performance of milk with its competitive set. Milk ranks second in per capita consumption within its competitive set, however with the rapid growth of bottled water it is likely to lose that second position in the next year or two. All competitive beverages outperformed milk in 2002; however, only bottled water and sports drinks realized positive per capita consumption growth.

Figure 4-4

| Per Capita Consumption Gallons & Change 2001-2002 | | | | |
|---|---------|------|--------|--|
| | 2001(r) | 2002 | Change | |
| CSD | 54.3 | 54.2 | -0.2% | |
| Milk | 22.5 | 22.4 | -0.6% | |
| Bottled Water | 19.3 | 21.2 | 9.8% | |
| Fruit Beverages | 15.0 | 15.0 | 0.0% | |
| Sports Drinks | 2.5 | 2.8 | 12.0% | |
| RTD Tea | 1.8 | 1.8 | 0.0% | |

r= Revised

Source: Beverage Marketing Corp.; USDA



As shown in **Figure 4-5**, the total competitive beverage set, including milk, grew at a CAGR of 2.3% from 1997 to 2002. Without milk, competitive set volume would have risen at a CAGR of 2.9% in the same period. A large contributor to recent competitive set growth has been bottled water. The competitive set *excluding bottled water* grew at a CAGR of just 1.0% from 1997 to 2002. For 2002, the competitive set excluding bottled water grew just 0.9%. In that context, milk, which grew 0.3%, did not significantly under-perform its competitors.

Volume Growth of Milk and Its Competitive Set 1997-2002

Figure 4-5

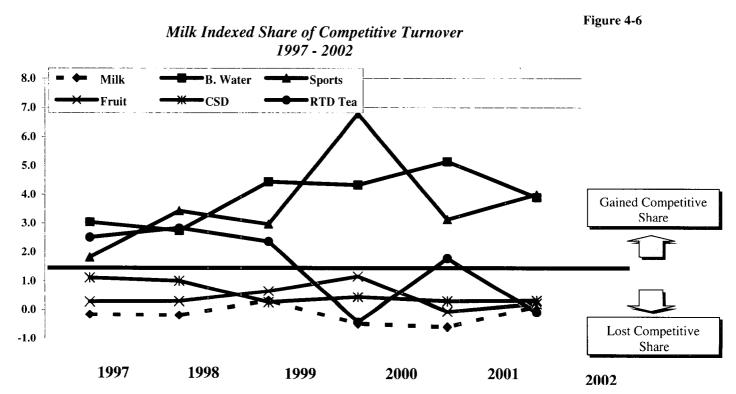
| | <u>Milk</u> | Total Competitive Set | Competitive Set Without Milk | Competitive Set Without Water |
|------------|-------------|--------------------------|---------------------------------|-------------------------------|
| 1997 | -0.4% | 2.8% | 3.8% | 2.0% |
| 1998 | -0.5% | 3.2% | 4.2% | 2.3% |
| 1999 | 0.7% | 2.4% | 2.9% | 1.1% |
| 2000 | -0.8% | 1.4% | 2.0% | 0.5% |
| 2001 | -0.9% | 1.7% | 2.3% | 0.2% |
| 2002 | <u>0.3%</u> | <u>2.5%</u> | <u>3.1%</u> | 0.9% |
| 97/02 CAGR | -0.2% | $\overline{2.3\%}$ | 2.9 % | $\overline{1.0\%}$ |

Source: Beverage Marketing Corp.; USDA

BMC analyzed milk's annual share of the volume increase of the entire competitive set over the past 15 years. This measure of milk's performance is an index based on its share of competitive volume change, divided by milk's market share of the competitive set at the beginning of the year. When this index is greater than 1, milk is improving its share. When it is less than 1, milk's share of the competitive set is declining. Milk's share of competitive turnover from 1997 to 2002 is shown in Figure 6, along with data for the competitive set. From 1997 to 1999, and again in 2002 milk showed improvement in competitive turnover rates, though still losing share to competitors. For milk, 2002 was the second consecutive year of improved share of competitive turnover, and was positive for the first year since 1999.

The analysis of competitive turnover is illustrative of the impact that bottled water has had on the entire beverage marketplace. See **Figure 4-6**. Bottled water has apparently taken share not only from milk but from almost every other beverage category, as well. (Sports beverages have been gaining share also, but from a very small volume and share base.) Bottled water fits squarely with the lifestyles of today's consumers who are active, always on the go and trying to consume healthier beverages.





Source: Beverage Marketing Corp.; USDA

Milk's competitive environment remains one of the most challenging in beverage history. Recent years have seen the increasing breadth and strength of major beverage brands, especially in the bottled water business, which raised the level of competition for consumers' minds and dollars. However, with the tough economic landscape of 2002, many beverage brands were unable to continue the high advertising spending levels of recent years, and total media spending was down for most beverage categories, including milk. See **Figure 4-7**.

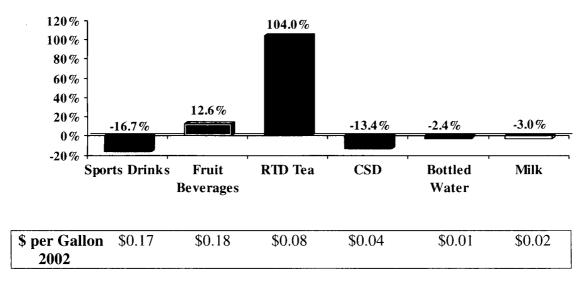
In 2002, at \$0.021 per gallon, milk spent significantly less on media advertising per gallon than all of its competitors except for bottled water, for which just \$0.014 per gallon is spent on media. In 2002, \$134.2 million was spent on milk media advertising. The large majority of that spending came from the national generic fluid milk program, with a small but increasing share – roughly 18%, being spent by individual processors on their own brands.



Again in 2002, carbonated soft drinks accounted for essentially half of all advertising spending of the competitive set. See **Figure 4-8**. Milk's \$134.2 million represented 10% of total media spending against the competitive set. Thus, with volume share of more than 19%, milk remains significantly underrepresented among its competitors in terms of media share of voice. It is interesting to note the low level of media spending against bottled water, as the category continues to realize significant volume growth through other means, including expanded packaging, distribution gains and pricing. Milk is limited in its ability to leverage these other means.

Changes to Competitive Set Media Spending per Gallon 2001 - 2002

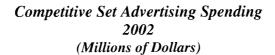
Figure 4-7

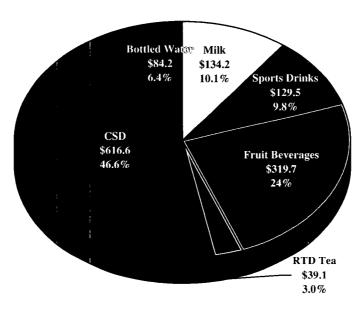


Source: Beverage Marketing Corp.; USDA; CMR Multimedia Service

Quantitative analysis of competitive beverages' promotional expenditure is not possible because the data are kept confidential by brand owners and there is no syndicated source for the information. However, BMC believes that milk is overspent by the competitive set to an even greater degree on promotion and other marketing programs than it is on advertising. This competitive disparity is undoubtedly a key contributor to milk's flat sales performance.







Source: Beverage Marketing Corp.; CMR Multimedia Service

BMC continues to believe that despite notable industry progress in the last several years, milk remains at a competitive disadvantage in several important respects, as outlined below. In many cases, these gaps can not be addressed through the generic marketing programs. Further progress will arise from individual producer and processor efforts against their specific operations, brands and market approaches.

Consumer attention

- An ever-increasing array of non-milk beverage products are competing for the attention of the consumer, including fruit juices and drinks, soymilk and others. Many have co-opted milk's product attributes, such as a good source of calcium.
- Continuous low share of media voice for milk likely has a cumulative negative effect against strong competitive category brands.



Product attributes and innovation

- With consumer-attractive single-serve packages and the addition of new flavors for immediate
 consumption becoming common in the milk industry, they are still limited primarily to one size and
 primarily to chocolate and represent a very small portion of milk's volume. Milk still offers limited
 new packages, products and flavors compared to the competition.
- In 2002, milk was coming off a five-year high in the number of new product introductions, and the number of new products was down more than 16%. Double-digit increases were seen in most of the other categories. To remain competitive, milk must institutionalize ongoing innovation.

Branding

- Milk's competitive set is dominated by world-class marketing organizations with powerful brands.
 Milk has only a handful of large brands and is still largely viewed as a commodity.
- The majority of milk volume is private label (60.5%, according to IRI data), while just a fraction of the competitive set is accounted for by private label (1% to 35%, depending on the category). This lack of strong milk brands continues to hamper milk's ability to compete, as we believe branded product marketing and advertising in particular is more effective than generic advertising in the beverage industry.
- Entry into the marketplace by national brands such as NesQuik[®], Hershey's[®], and Looney Tunes[®] have helped drive growth, but still account for a small share of volume.

Distribution

- Despite the generic program's efforts against fast-growing, non-traditional retail channels, including vending, foodservice and convenience, milk remains a primarily supermarket-purchased, take-home product. Many of the competitive categories sell as much as 50% of volume through these immediate consumption channels, versus 18% for milk.
- The industry is slowly learning of the potential for milk vending, and it could become an important channel for processors, with the potential to improve the availability, merchandising and consumption of milk in numerous locations. However, the capital investment required is a hurdle for many processors and vend operators, and milk vending remains underdeveloped relative to the competition.



 Product perishability limits promotion and display efforts and eliminates retailer and consumer stock-up. BMC believes that higher in-home inventories of beverage products can lead to increased consumption levels. However, new pasteurization and packaging techniques are beginning to create distribution, display and stock-up options. Consumer perception of these products and their "freshness" needs to be modified in order to make them truly viable.

Pricing

- The milk industry is limited (structurally and legally) in its use of price promotion. Specifically, product perishability as well as state regulations limit the industry's ability to use price promotions.
- Milk's competitive set uses price promotion aggressively to promote consumption and stock-up.



BMC'S ASSESSMENT OF CURRENT MILK MARKETING PROGRAMS

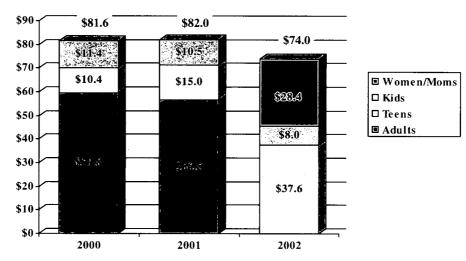
Beverage Marketing believes the marketing campaign under the Dairy Act and the Fluid Milk Act has successfully slowed milk's long historical slide in per capita consumption dating back to 1970. While in last year's report BMC suggested that milk's volumetric downturn in 2000 and 2001 may have been evidence of a lagged effect of the decline in milk's media spending and share of voice, it is also likely that the recent shift in monetary resources from media to other marketing programs targeted against key consumer groups (including events, sponsorships, and public relations) has been effective.

Figure 4-9 shows the decline in generic media advertising in 2002. The budget for the teen target increased more than two-fold, while the budgets against younger children and adults declined. The industry has successfully targeted teens specifically with new advertising that focuses on single-serve and flavors, the key growth segments within the milk category. This likely contributed to the resumption of growth in teen per capita milk consumption. The program also continues to utilize and evolve the Milk Mustache campaign, which maintains markedly high awareness rates among target consumer groups.

In line with past BMC recommendations, the milk campaign has recently been more focused on key segments likely to drive future industry growth (e.g., flavored milk, Hispanics, kids, and teens) and has reduced efforts against non-core users, including male adults.

Fluid Milk Generic Media Budget 2000-2002 (Millions of Dollars)

Figure 4-9



Source: Beverage Marketing Corp.; Bozell



Beverage Marketing believes milk's consumption declines would be greater without the national generic program. The milk marketing campaign has effectively defended milk against strong competition and has done so with less advertising spending per gallon than almost any other segment in the competitive beverage set. However, it is little surprise that milk per capita consumption is shrinking when we consider how it has been competing for consumers. Milk has experienced five consecutive years of decreases in advertising spending while no competitive category has had two consecutive years of substantial decreases. Milk's competition is leveraging substantial, steady advertising expenditure for higher share of voice.

Advertising expenditure is one very large and critical piece of the total generic milk campaign; however, reductions in advertising expenditures have largely been shifted to increased promotional efforts and various strategic and operational initiatives, such as supporting and encouraging processors to innovate and market their brands, and the further development of retail and school related programs. It is BMC's belief that these initiatives, supported by the strong advertising campaign, are slowly beginning to impact milk consumption, but more importantly will have cumulative, enduring affects on milk's image, usage, availability and consumption.

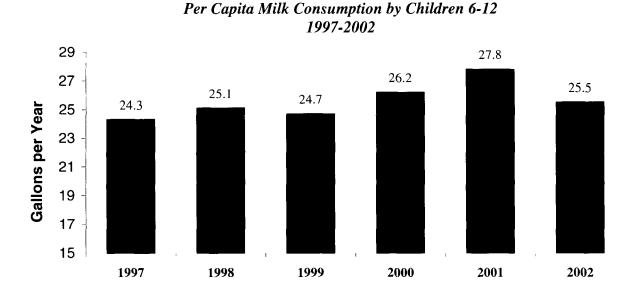
In 2002, generic program elements (i.e., media, PR, events, etc.) became increasingly integrated and aligned with the program's core messaging. In addition, the programs have become more targeted to specific demographic groups, largely age cohorts. For example, the Milk Mustache Mobile had, in previous years, focused on retail venues such as supermarkets. In 2002, when the Mobile changed its focus and began targeting events and locations where teens congregate, participation increased three-fold. Schools, where kids and teens spend the majority of their time, have been another important target for the program in 2002.

The targeted strategy appears to be a powerful tool for increasing milk consumption. Teen consumption increases, as discussed above, were likely driven by increased focus and spending against that target, both through advertising as well as other marketing programs. The increasing availability of flavors and innovative milk packaging for single-serve products was likely also an important contributor to this growth. BMC believes that positive change will be based on a dual platform for growth, consisting of strong, targeted generic programs and industry innovation in products, availability and branding.

The crucial 6- to 12- year-old demographic group had shown increases in per capita consumption for two ears. In 2002, however, per capita consumption for children ages 6-12 declined significantly, to below 2000 levels. See **Figure 4-10**. One year does not make a trend, however; this reversal may have been driven in part by the cumulative effect of decreased media spending over the last two years.



Figure 4-10

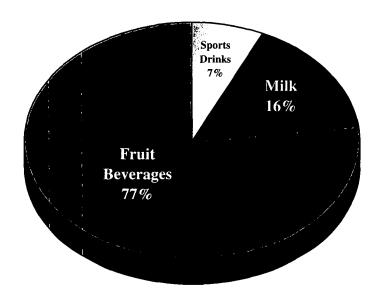


In terms of ad dollars spent against the target, in 2002, milk's share of media spending against children ages 6 to 12 was significantly less than the largest advertiser, fruit beverages. See **Figure 4-11**. This is against a share of stomach of more than 35%, thus milk's share of voice is markedly low for children. The fruit beverage industry has been very innovative in targeting children through packaging, availability and advertising. In addition, by enhancing fruit beverages with calcium and vitamins, the industry is also addressing the concerns of "Gate-keeper Moms," and may be co-opting milk's unique health positioning for kids.

Milk's gains with the 6- to 12-year-old and teen cohorts are important because it is at this age that children begin to form life-long brand and product loyalties, as well as life-long eating and drinking habits. Kids and teens have been targeted either directly through media channels, through school programs or through "gatekeepers" like parents who control the options of children. The milk industry has undertaken research and is formulating programs for increasing milk consumption specifically in schools, by upgrading the products available and consequently upgrading the image of school milk for long-term benefit. While the effect of this increased focus on schools may not be seen for some time, BMC believes that it is critical for the industry to address this venue, where milk has been losing consumption for many years.



2002 TV Beverage Media Spending against Children Share of Voice (000's of Dollars)



Source: Beverage Marketing Corp.; Bozell

The got milk? Milk Mustache Campaign has evolved into a contemporary image-based campaign that still effectively communicates the nutritional benefits of milk. However, that contemporary image is not supported by the products that children are offered in school. Additionally, a contemporary, image-based campaign is not in itself differentiating; thus, making a connection between milk's image and higher order need states/values such as self-esteem, well-being, and confidence will be crucial for milk in order to compete for consumers' attention and loyalty. As suggested by BMC in the last two annual reports, milk programs may need some strategic re-thinking to effectively drive milk's position in the beverage marketplace. The generic programs have undertaken a reevaluation of milk's generic positioning, and findings from that work will be incorporated into future programs and communications. This should allow milk's image and position to evolve to be more competitive. Additionally, as product, package, and channel innovations increase the potential usage occasions for milk, an evolution of the campaign has become necessary to fully leverage these new opportunities. The teen advertising, which features flavors and, in 2003, single-serve packaging begins to address that need.



As milk's competition grows ever more fierce, it will be critical for the generic programs to continue to focus or refocus resources against the primary targets, especially kids and teens, while evolving the messaging to link to higher-order consumer benefits and support image-enhancement. However, as has been pointed out in past industry reviews, the impact of these programs will necessarily be limited unless or until they are supported by relevant industry platforms, including the right products, pervasive availability and significant brand-building focus.

In summary, there are three crucial focus areas that the generic programs can address to improve milk's position: evolve the marketing message towards higher-order consumer need states, continue to focus or refocus on key demographics/targets, support increased development and availability of new products for more diverse usage occasions, and maximize distribution through non-traditional channels.



APPENDIX A-1

NATIONAL DAIRY PROMOTION AND RESEARCH BOARD CURRENT MEMBER LISTING

REGION 1 (Oregon and Washington)

Marlin J. Rasmussen

St. Paul, Oregon First term expires 10/31/04

REGION 2 (California)

William R. Ahlem, Jr.

Hilmar, California Second term expires 10/31/04

Robert R. Bignami

Chico, California First term expires 10/31/04

Margaret A. Gambonini

Petaluma, California First term expires 10/31/04

Dennis A. Leonardi

Ferndale, California First term expires 10/31/03

Patricia M. Van Dam

Chino, California First term expires 10/31/04

John Zonneveld, Jr.

Laton, California Second term expires 10/31/05

REGION 3 (Arizona, Colorado, Idaho, Montana, Nevada, Utah, and Wyoming)

Steve P. Frischknecht

Manti, Utah Second term expires 10/31/04

Lester E. Hardesty

Greeley, Colorado First term expires 10/31/05

Pete R. Lizaso

Emmett, Idaho Second term expires 10/31/03 REGION 4 (Arkansas, Kansas, New Mexico,

Oklahoma, and Texas)

Charles W. Bryant

Austin, Arkansas First term expires 10/31/03

Lynda Foster

Fort Scott, Kansas Second term expires 10/31/04

Neil A. Hoff

Windthorst, Texas Second term expires 10/30/05

REGION 5 (Minnesota, North Dakota, and South

Dakota)

Arlon E. Fritsche

New Ulm, Minnesota First term expires 10/31/03

Loren E. Jons

Bonesteel, South Dakota First term expires 10/31/03

Cynthia R. Langer

Faribault, Minnesota First term expires 10/31/05

REGION 6 (Wisconsin)

Patricia M. Boettcher

Bloomer, Wisconsin Second term expires 10/31/05

Rosalie M. Geiger

Reedsville, Wisconsin First term expires 10/31/04

William J. Herr

Greenwood, Wisconsin First term expires 10/31/05

NATIONAL DAIRY PROMOTION AND RESEARCH BOARD CURRENT MEMBER LISTING (CONTINUED)

REGION 6 (Wisconsin) Continued

Allard L. Peck

Chippewa Falls, Wisconsin First term expires 10/31/03

Connie M. Seefeldt

Coleman, Wisconsin First term expires 10/31/03

REGION 7 (Illinois, Iowa, Missouri, and Nebraska)

Pam Rolin

Clarksville, Iowa First term expires 10/31/05

Wayne E. Dykshorn

Ireton, Iowa

First term expires 10/31/03

REGION 8 (Alabama, Kentucky, Louisiana, Mississippi, and Tennessee)

Michael M. Ferguson

Coldwater, Mississippi

First term expires 10/31/05

REGION 9 (Indiana, Michigan, Ohio, and West Virginia)

Merle L. Chaplin

Moundsville, West Virginia Second term expires 10/31/03

Alice S. Moore

Frazeysburg, Ohio First term expires 10/31/04

Deanna S. Stamp

Marlette, Michigan First term expires 10/31/05

REGION 10 (Florida, Georgia, North Carolina, South Carolina, and Virginia)

Robert K. Herman

Taylorsville, North Carolina Second term expires 10/31/04

Sanford L. Jones, Jr.

Quitman, Georgia First term expires 10/31/03

REGION 11 (Delaware, Maryland, New Jersey, and Pennsylvania)

Deborah A. Benner

Mt. Joy, Pennsylvania First term expires 10/31/04

Lewis Gardner

Galeton, Pennsylvania First term expires 10/31/03

Rita Kennedy

Valencia, Pennsylvania Second term expires 10/31/05

REGION 12 (New York)

Audrey G. Donahoe

Frankfort, New York Second term expires 10/31/05

David E. Hardie

Lansing, New York First term expires 10/31/04

Edgar A. King

Schuylerville, New York First term expires 10/31/03

REGION 13 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont)

Claude J. Bourbeau

St. Albans, Vermont Second term expires 10/31/05

APPENDIX A-2

NATIONAL FLUID MILK PROCESSOR PROMOTION BOARD CURRENT MEMBER LISTING

REGION 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont)

Peter M. Ross Garelick Farms, Inc., Dean Foods Company

Franklin, Massachusetts Term expires 06/30/2004

REGION 2 (New Jersey and New York)

Mary Ellen Spencer H. P. Hood, Inc.

Chelsea, Massachusetts Term expires 06/30/2005

REGION 3 (Delaware, Maryland, Pennsylvania, Virginia, and District of Columbia)

Michael F. Nosewicz The Kroger Company

Cincinnati, Ohio Term expires 06/30/2006

REGION 4 (Georgia, North Carolina, and South Carolina)

Joseph Cervantes

Crowley Foods, LLC., National Dairy Holdings

Binghamton, New York Term expires 06/30/2004

REGION 5 (Florida)

James S. Jaskiewicz Publix Supermarkets, Inc.

Lakeland, Florida Term expires 06/30/2005

REGION 6 (Ohio and West Virginia)

William R. McCabe Smith Dairy Products Co.

Orrville, Ohio Term expires 06/30/2006 **REGION 7** (Michigan, Minnesota, North Dakota, South Dakota, and Wisconsin)

Rachel Kyllo

Marigold Foods, Inc., National Dairy Holdings

Minneapolis, Minnesota Term expires 06/30/2004

REGION 8 (Illinois and Indiana)

Roger D. Capps Prairie Farms Dairy, Inc.

Carlinville, Illinois Term expires 06/30/2005

REGION 9 (Alabama, Kentucky, Louisiana, Mississippi, and Tennessee)

James W. Turner Turner Holdings, LLC

Memphis, Tennessee Term expires 06/30/2006

REGION 10 (Texas)

John Robinson
Dean Foods Company

Dallas, Texas Term expires 06/30/2004

REGION 11 (Arkansas, Iowa, Kansas, Missouri, Nebraska, and Oklahoma)

Gary L. Aggus Hiland Dairy Foods

Springfield, Missouri Term expires 06/30/2005

NATIONAL FLUID MILK PROCESSOR PROMOTION BOARD CURRENT MEMBER LISTING (CONTINUED)

REGION 12 (Arizona, Colorado, New Mexico, Nevada, and Utah)

Lawrence V. Jackson Safeway, Inc.

Pleasanton, California Term expires 06/30/2006

REGION 13 (Idaho, Montana, Oregon, Washington, and Wyoming)

James T. Wilcox III Wilcox Farms, Inc. Roy, Washington Term expires 06/30/2004

REGION 14 (Northern California)

Ronald M. Foster Foster Dairy Farms Modesto, California Term expires 07/2005

REGION 15 (Southern California)

Richard Walrack Santee Dairies, Inc. City of Industry, California Term expires 06/30/2006 MEMBERS-AT-LARGE

Robert E. Baker ¹ Omaha, Nebraska Term expires 06/30/2006

Term expires 06/30/2004

Michael A. Krueger Shamrock Foods Company Phoenix, Arizona

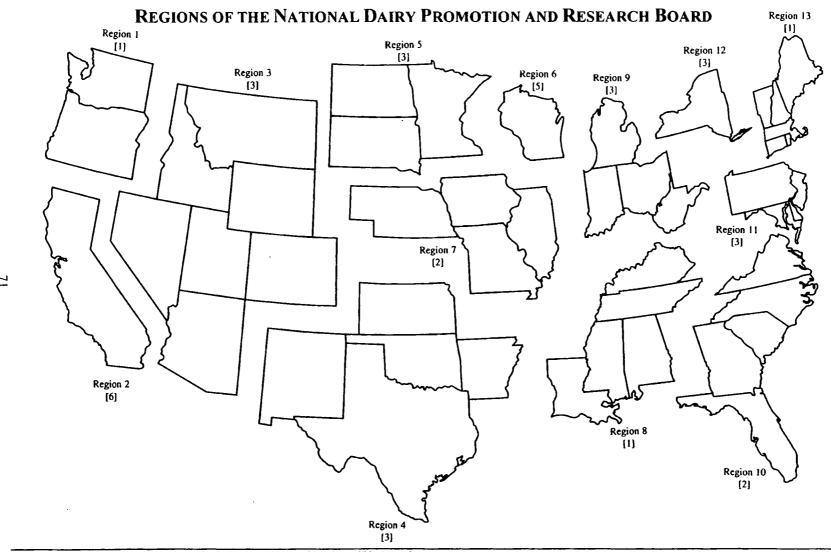
Susan D. Meadows Dean Foods Company Dallas, Texas Term expires 06/30/2006

Charles D. Price
Galliker Dairy Company
Johnstown, Pennsylvania
Term expires 06/30/2005

Joseph W. Van Treeck ¹ Anchorage, Alaska Term expires 06/30/2004

¹ Public Member

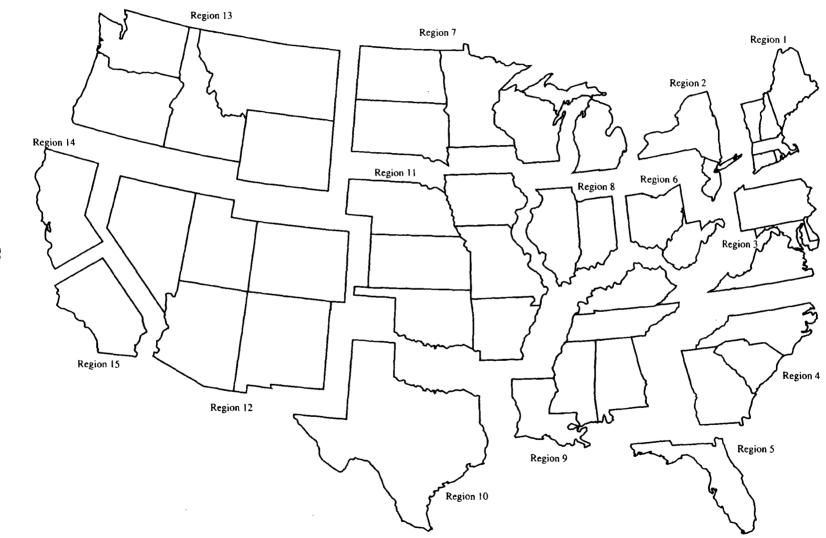
APPENDIX B-1



NOTE: The number in brackets below each region indicates the number of members within that region.

APPENDIX B-2

REGIONS OF THE NATIONAL FLUID MILK PROCESSOR PROMOTION BOARD



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APPENDIX C-1
NATIONAL DAIRY BOARD: ACTUAL INCOME AND EXPENSES, FY 2000–2002
(in \$000's)

2000 2001 2002 **INCOME** \$84,746 86,619 Assessments 83,633 Interest 369 \$85,345 **Total Income** 84,002 86,691 **GENERAL EXPENDITURES** General & Administrative \$2,570 2,676 2,919 **USDA** 454 567 471 **Total General Expenditures** \$3,137 3,147 3,373 PROGRAM EXPENDITURES Communications & Member Relations \$4,426 7,929 8.269 Domestic Marketing \$65,237 73,229 68.114 4,934 **Export Enhancement** \$6,171 5,565 Research & Evaluation \$3,742 2,537 3,492 **Total Program Expenditures** \$79,576 89,260 84,809 Excess of Revenue (Under) Over Expenditures \$2,632 (8,405)(1,491)Fund Balance, Beginning of Year \$13,541 16,173 7,768 Fund Balance, End of Year \$16,173 6,277 7,768

SOURCE: Independent Auditor's Report of the National Dairy Board and USDA Records.

APPENDIX C-2 USDA OVERSIGHT COSTS FOR THE NATIONAL DAIRY BOARD, FY 2000–2002

| | 2000 | 2001 | 2002 |
|----------------------------|------------------|-----------------|-----------------|
| Salaries and Benefits | \$286,546 | \$283,350 | \$300,666 |
| Travel | 28,983 | 21,925 | 24,567 |
| Miscellaneous ¹ | 63,614 | 74,054 | 41,037 |
| Equipment | 4,205 | 4,731 | 2,053 |
| Printing | 5,622 | <u>5,551</u> | (74) |
| AMS OVERSIGHT | \$388,970 | \$389,611 | \$368,249 |
| INDEPENDENT EVALUATION | <u>\$ 65,331</u> | <u>\$99,837</u> | <u>\$83,107</u> |
| TOTAL ² | \$454,301 | \$489,448 | \$451,356 |

¹ Includes overhead, transportation, rent, communications, utilities, postage, contracts, supplies, photocopying, and the Office of the General Counsel costs.

² The totals for USDA expenses differ stightly from those shown in Appendix C-1 for some years because of end-of-year estimates which are adjusted in the following fiscal year. SOURCE: Monthly billings by USDA-AMS-Dairy Programs to the National Dairy Board.

APPENDIX C-3 NATIONAL DAIRY BOARD: APPROVED BUDGETS, FY 2001–2003

| (in S | 9000 | s) |
|-------|------|----|
|-------|------|----|

| | | | | | | |
|-----------------------------------|------------|-------------|--------------|---------|--------------|---------|
| | 2001 | | 2002 | | 2003 | |
| REVENUES | | | | | | |
| Assessments | \$84,200 | | \$84,750 | | \$94,200 | |
| Interest | <u>475</u> | | <u>250</u> | | 100 | |
| Total Income | \$84,675 | | \$85,000 | | \$94,300 | |
| Program Development Fund | 6,928 | | 2,307 | | | |
| Total Available Funds | \$91,603 | | \$87,307 | | \$94,300 | |
| EXPENSES | | | | | | |
| General & Administrative | \$3,275 | | \$2,971 | | \$3,168 | |
| USDA-AMS Oversight | _ 500 | | <u>525</u> | | _525 | |
| Subtotal | \$3,775 | | \$3,496 | | \$3,693 | |
| PROGRAM BUDGET | | | | | | |
| Domestic Marketing | \$74,413 | [84.7%] | \$66,032 | [78.7%] | \$64,888 | [71.6%] |
| Communications & Member Relations | 5,904 | [6.7%] | 9,651 | [11.2%] | 7,946 | [8.8%] |
| Research and Evaluation | 2,368 | [2.7%] | 3,532 | [4.3%] | 6,464 | [7.1%] |
| Budgeted But Not Allocated | - | | - | | 6,000 | [6.6%] |
| Export Enhancement | 5,143 | [5.9%] | <u>4,776</u> | [5.8%] | <u>5,309</u> | [5.9%] |
| Subtotal | \$87,828 | [100%] | \$83,991 | [100%] | \$90,607 | [100%] |
| Total Budget | \$91,603 | | \$87,307 | | \$94,300 | |
| . Van 2 aager | 4,7,000 | | 40.,-0. | | 42 1,000 | |

SOURCE: Budgets received and approved by USDA from the National Dairy Board.

75

76

Interest

Strategic Thinking

APPENDIX C-4 NATIONAL FLUID MILK BOARD: ACTUAL INCOME AND EXPENSES, FY 2000–2002

2002

\$107,816

503

458

52

289

979

(in \$000's) 2001 2000 **INCOME** \$107,694 \$109,290 Assessments Late Payment Charges 241 51 639 404

| Interest | 037 | 707 | 207 |
|----------------------------|-----------|------------|----------|
| Other | 21 | <u>675</u> | 28 |
| Total Income | \$110,001 | \$109,014 | 108,185 |
| GENERAL EXPENDITURES | | | |
| California Refund | \$10,217 | \$10,036 | \$10,218 |
| Administrative Expenses | 2,310 | 2,117 | 2,412 |
| USDA-AMS Oversight | 368 | 321 | 333 |
| Compliance Audit | 24 | 43 | 3 |
| Bad Debt Expense | 9 | | |
| Total General Expenditures | \$12,928 | \$12,517 | \$12,966 |
| PROGRAM EXPENDITURES | | | |
| Media | \$68,287 | \$73,943 | \$73,275 |
| Public Relations | 10,715 | 9,582 | 10,815 |
| Promotions | 14,476 | 10,150 | 5,189 |

Medical Advisory Panel 206 200 74 120 120 American Heart Association 19 Research, Local Markets, & Program Measurement 997 614 1,914 Program Management 1,254 **Total Program Expenditures** \$95,158 \$95,112 \$93,620 Excess of revenue (under) over expenditures \$1,915 \$1,600 \$1,385 Beginning of year fund balance \$13,388 \$15,303 \$16,688 End of year fund balance \$15,303 \$16,688 \$18,288

SOURCE: Independent Auditor's Report of the Fluid Milk Board and USDA records.

APPENDIX C-5
USDA OVERSIGHT COSTS FOR THE NATIONAL FLUID MILK BOARD, FY 2000–2002

| | 2000 | 2001 | 2002 |
|----------------------------|-----------------|-----------------|-----------------|
| Salaries and Benefits | \$243,281 | \$246,200 | \$232,038 |
| Travel | 20,617 | 12,843 | 19,777 |
| Miscellaneous ¹ | 48,090 | 50,771 | 24,704 |
| Equipment | 4,389 | 4,868 | 3,563 |
| Printing | 5,137 | <u>6,571</u> | (61) |
| AMS OVERSIGHT | \$321,514 | \$321,253 | \$280,022 |
| INDEPENDENT EVALUATION | <u>\$24,555</u> | <u>\$32,667</u> | <u>\$25,932</u> |
| TOTAL ² | \$346,069 | \$353,920 | \$305,954 |

¹ Includes overhead, transportation, rent, communications, utilities, postage, contracts, supplies, photocopying, and the Office of the General Counsel costs.

² The totals for USDA expenses differ slightly from those shown in Appendix C-4 for some years because of end-of-year estimates which are adjusted in the following fiscal year. SOURCE: Monthly billings by USDA-AMS-Dairy Programs to the National Fluid Milk Board.

NATIONAL FLUID WIIL

NATIONAL FLUID MILK BOARD: APPROVED BUDGETS, FY 2001–2003

(in \$000's)

APPENDIX C-6

| (111 \$000 5) | | | | | |
|---|-----------|---------|----------------|---------|------------------|
| | 2001 | | 2002 | | 2003 |
| REVENUES | | | | | |
| Assessments | \$110,000 | | \$106,650 | | \$105,800 |
| Interest | | | | | |
| Total Revenues | \$110,000 | | \$106,650 | | \$105,800 |
| California TV Rebate | \$800 | | - | | - |
| Carryover from Previous FY | 3,184 | | <u>\$3,508</u> | | \$5,328 |
| Total Available Funds | \$113,984 | | \$110,158 | | \$111,128 |
| EXPENSES | | | | | |
| General and Administrative | \$3,000 | | \$2,280 | | \$2,500 |
| USDA-AMS Oversight | 350 | | 350 | | 350 |
| Independent Evaluation | _1 | | _1 | | _1 |
| Processor Compliance | _2 | | _2 | | _2 |
| Reserve/Contingency | - | | - | | - |
| California Refund | _10,300 | | 10,146 | | <u>9,991</u> |
| Subtotal | \$13,650 | | \$12,776 | | \$12,841 |
| PROGRAM BUDGET | | | | | |
| Advertising | \$74,640 | [74.4%] | \$74,417 | [76.8%] | \$71,400 [73.2%] |
| Public Relations | 9,390 | [9.4%] | 10,900 | [11.2%] | 13,275 [13.6%] |
| Promotions | 13,529 | [13.5%] | 7,031 | [7.3%] | 8,500 8.7%} |
| Strategic Thinking | 700 | [0.7%] | 900 | [0.9%] | 1,400 [1.4%] |
| Medical Advisory Panel | 250 | [0.2%] | 200 | [0.2%] | 200 0.2%] |
| Research | 1,625 | [1.6%] | 1,653 | [1.7%] | 1,650 [1.7%] |
| American Heart Association, On-Pack Other | - | | 650 | [0.7%] | - |
| Program Management | - | | 991 | [1.0%] | 1,000 1.0%] |
| Program Measurement | 200 | 0.2% | <u> 150</u> | [0.2%] | 150 [0.2%] |
| Subtotal | \$100,334 | [100%] | \$96,892 | [100%] | \$97,575 [100%] |
| Unallocated | | | <u>490</u> | | <u>712</u> |
| Total Budget | \$113,984 | | \$110,158 | | \$111,128 |

¹Independent Evaluation costs are included in Program Measurement expenses.

SOURCE: Budgets received and approved by USDA from the Fluid Milk Board.

²Processor Compliance included in General and Administrative expenses.



APPENDIX D-1

303 East Wacker Drive Chicago, IL 60601-5212

The Board of Directors National Dairy Promotion and Research Board Rosemont, Illinois

April 2, 2003

Ladies and Gentlemen:

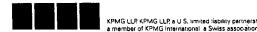
We have audited the financial statements of the National Dairy Promotion and Research Board, for the year ended December 31, 2002, and have issued our report thereon dated April 2, 2003. In planning and performing our audit of the financial statements of the National Dairy Promotion and Research Board, we considered internal control in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements. An audit does not include examining the effectiveness of internal control and does not provide assurance on internal control.

Our consideration of internal control would not necessarily disclose all matters in internal control that might be material weaknesses under standards established by the American Institute of Certified Public Accountants. A material weakness is a condition in which the design or operation of one or more internal control components does not reduce to a relatively low level the risk that errors or fraud in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. However, we noted no matters involving internal control and its operation that we consider to be material weaknesses as defined above.

This report is intended solely for the information and use of the United States Department of Agriculture, the Board of Directors, management and others within the organization and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,







303 East Wacker Drive Chicago, IL 60601-5212

Independent Accountants' Report On Applying Agreed-upon Procedures

The Board of Directors
National Dairy Promotion and Research Board:

We have performed the procedures enumerated below, which were agreed to by the U.S. Department of Agriculture (USDA) and National Dairy Promotion and Research Board (NDB), solely to assist the specified parties in evaluating the entities' compliance with The Dairy and Tobacco Adjustment Act of 1983 (Act), the Dairy Promotion and Research Order (Order), and the Agricultural Marketing Services Directive (Directive) entitled *Investments of Public Funds* as of and for the year ended December 31, 2002. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representations regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

Our procedures and findings were as follows:

- (a) We obtained NDB's budget for the year ended December 31, 2002 and sighted the signature of the Secretary of the USDA.
- (b) We selected four investment purchase transactions from calendar year 2002, compared them against their respective brokers' advices, and noted the following:
 - The investments were in either U.S. Government Securities or Federal Agency Securities,
 - The investments had maturity periods of one year or less;
 - The U.S. Government Securities and Federal Agency Securities were held in the name of NDB at the institution.
- (c) We obtained the 1996 investment files and sighted various broker's advices noting that the investment records have been maintained for six years.

We were not engaged to, and did not conduct an examination, the objective of which would be the expression of an opinion on compliance. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of the USDA and NDB and is not intended to be and should not be used anyone other than these specified parties.

KPMG LLP

April 2, 2003



303 East Wacker Drive Chicago, IL 60601-5212

Independent Auditors' Report

The Board of Directors
National Dairy Promotion and Research Board:

We have audited the accompanying balance sheets of National Dairy Promotion and Research Board (NDB) as of December 31, 2002 and 2001, and the related statements of activities and cash flows for the years then ended. These financial statements are the responsibility of the NDB's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of National Dairy Promotion and Research Board at December 31, 2002 and 2001, and the changes in its net assets and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our 2002 audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information included in the schedule of reconciliation of operations budget is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the 2002 basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

KPMG LLP

April 2, 2003

Balance Sheets

December 31, 2002 and 2001

| Assets | 2002 | 2001 |
|---|------------------------------|------------------------|
| Cash and cash equivalents (note 3) Assessments receivable, net (note 4) | \$ 8,686,682 7,793,974 | 7,829,872 8,657,497 |
| Accrued interest receivable Fixed assets (net of accumulated depreciation | 7,793,974 92 | 5,009 |
| of \$108,888 and \$100,279 in 2002 and 2001, respectively) | 29,028 | 34,517 |
| | \$ 16,509,776 | 16,526,895 |
| Liabilities and Net Assets | | |
| Accounts payable: | | |
| Related party – DMI | \$ 9,760,282 | 8,362,285 |
| Other | 199,157 | 59,817 |
| Accrued expenses and other liabilities | 273,365 | 336,714 |
| Total liabilities | 10,232,804 | 8,758,816 |
| Commitments (note 5) | | |
| Net assets – unrestricted | 6,276,972 | 7,768,079 |
| Total liabilities and net assets | \$ 16,509,776 | 16,526,895 |

See accompanying notes to financial statements.

Statements of Activities

Years ended December 31, 2002 and 2001

| | | 2002 | 2001 |
|--|----|---|--|
| Revenue: Assessments Interest income | \$ | 86,619,316 71,972 | 83,632,543 369,700 |
| Total revenue | _ | 86,691,288 | 84,002,243 |
| Expenses: | | | |
| Program: Domestic marketing group Research and evaluation group Communications/member relations group Export group United States Department of Agriculture | | 66,496,432 3,204,090 10,174,244 4,933,680 454,482 | 73,228,579 2,537,295 7,929,008 5,564,741 471,212 |
| Total program | | 85,262,928 | 89,730,835 |
| General and Administrative: DMI general and administrative General and administrative Total general and administrative | | 2,467,207 452,260 2,919,467 | 2,255,774 420,383 2,676,157 |
| Total expenses | | 88,182,395 | 92,406,992 |
| Decrease in net assets | | (1,491,107) | (8,404,749) |
| Net assets at beginning of year | | 7,768,079 | 16,172,828 |
| Net assets at end of year | \$ | 6,276,972 | 7,768,079 |

See accompanying notes to financial statements.

Statements of Cash Flows

Years ended December 31, 2002 and 2001

| | 2002 | 2001 |
|--|-------------------|-------------|
| Cash flows from operating activities: | | |
| Decrease in net assets | \$ (1,491,107) | (8,404,749) |
| Adjustments to reconcile deficiency of revenue over expenses to net cash provided by (used in) operating activities: | | |
| Depreciation and amortization | 8,609 | 5,560 |
| Changes in assets and liabilities: | | |
| Decrease in assessments receivable | 863,523 | 1,614,429 |
| Decrease in accrued interest receivable | 4,917 | 70,382 |
| Increase in accounts payable | 1,537,337 | 1,144,592 |
| Decrease in accrued expenses and other liabilities | (63,349) | (127,928) |
| Net cash provided by (used in) operating activities | 859,930 | (5,697,714) |
| Cash flows used in investing activities: | | |
| Acquisition of fixed assets | (3,120) | (27,387) |
| Net increase (decrease) in cash and cash equivalents | 856,810 | (5,725,101) |
| Cash and cash equivalents at beginning of year | 7,829,872 | 13,554,973 |
| Cash and cash equivalents at end of year | \$ 8,686,682 | 7,829,872 |

See accompanying notes to financial statements.

Notes to Financial Statements December 31, 2002 and 2001

(1) Organization

The National Dairy Promotion and Research Board (NDB) was established on May 1, 1984, pursuant to The Dairy and Tobacco Adjustment Act of 1983 (Public Law 98-180), as part of a comprehensive strategy to reduce milk surplus supplies in the United States (U.S.) and increase human consumption of U.S. produced fluid milk and other dairy products. The purpose of NDB is to establish a coordinated program of promotion and research designed to strengthen the U.S. dairy industry's position in the marketplace and to maintain and expand domestic and foreign markets' usage of U.S. produced fluid milk and other dairy products.

The United States Department of Agriculture (USDA) approved a joint venture between NDB and the United Dairy Industry Association (UDIA) to form Dairy Management Inc. (DMI) effective January 1, 1995. The purpose of DMI, a related organization, is to promote greater coordination, efficiency, and effectiveness and avoid incompatibility and duplication in the marketing programs and projects undertaken by NDB and UDIA. NDB and UDIA will jointly plan, develop, and implement their various marketing programs and activities through DMI, subject to the approval of the USDA.

NDB funds DMI on a cost reimbursement basis. Core costs, which include staff salaries and benefits, travel, Board of Directors, and office overhead expenses are funded by NDB and UDIA. Core costs are primarily funded by NDB, with UDIA funding one-half of Board of Directors and executive office costs. Marketing program costs, which include expenses associated with implementing the marketing programs of NDB and UDIA, are funded by NDB and UDIA based on the annual Unified Marketing Plan budget. NDB has funded DMI core costs of \$13,862,831 and \$12,828,399 and program costs of \$73,412,822 and \$76,815,232, for activity related to the years ended December 31, 2002 and 2001, respectively.

The U.S. Dairy Export Council (USDEC) is a related organization that was founded by the boards of both NDB and UDIA and began operations effective January 1, 1996. The purpose of USDEC is to improve the marketing conditions for the U.S. dairy industry with respect to the export of U.S. dairy products by promoting the acceptability, consumption, and purchase of U.S. dairy products in foreign countries. For the years ended December 31, 2002 and 2001, NDB reimbursed DMI \$4,933,680 and \$5,564,741, respectively, for USDEC's operations.

(2) Summary of Significant Accounting Policies

The financial statements of NDB have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America. To facilitate the understanding of information included in the financial statements, summarized below are the more significant accounting policies.

(a) Cash Equivalents

NDB considers debt investment instruments with an original maturity of three months or less to be cash equivalents.

Notes to Financial Statements December 31, 2002 and 2001

(b) Assessments

Assessment revenue is generated by a mandatory assessment of 15 cents per hundredweight on all milk produced and marketed in the contiguous United States. Milk handlers and marketers can receive a credit of up to 10 cents per hundredweight for payments to USDA qualified state and regional generic dairy promotion organizations. For the years ended December 31, 2002 and 2001, the net NDB assessment was approximately 5.13 and 5.12 cents per hundredweight of milk marketed, respectively. Assessment revenue is recognized in the month in which milk is marketed.

(c) Fixed Assets

Fixed assets consist of computer equipment and software and are recorded at cost. Depreciation and amortization are provided in amounts sufficient to charge the cost of depreciable assets to operations over estimated service lives of approximately three to seven years using the straight-line method.

(d) Net Assets

All net assets of the NDB at December 31, 2002 and 2001 are unrestricted.

(e) Contract and Grant Expense

Expenses related to contracts are recognized as incurred. Grants for research projects typically require periodic reporting of project status and payments. Such payments are expensed as progress is achieved. In addition, a portion of fund balance is designated for future payments under existing contracts and grants (see note 5).

(f) Income Taxes

NDB has received a determination letter from the Internal Revenue Service indicating that it is exempt from Federal and state income taxes on related income under 501(c)(3) of the Internal Revenue Code. There was no unrelated business taxable income for the years ended December 31, 2002 and 2001; therefore, no provision for income taxes has been reflected in the accompanying financial statements related to activities of NDB.

(g) Use of Estimates

Management of NDB has made certain estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the period. Actual results could differ from those estimates.

(h) Employee Costs

NDB's operations are staffed by DMI employees, who receive vacation, retirement, health, and other benefits.

Notes to Financial Statements December 31, 2002 and 2001

(3) Cash and Cash Equivalents

Cash and cash equivalents consist of the following as of December 31:

| | 2002 | 2001 |
|--|------------------------------|----------------------|
| Operating cash in banks and on hand Federal agency discounted securities | \$ 2,052,866 6,633,816 | 485,156 7,344,716 |
| | \$ 8,686,682 | 7,829,872 |

(4) Assessments Receivable

Assessments receivable are recorded at the estimated net amounts to be received based on the amount of milk marketed and the average payment per hundredweight. In accordance with Public Law 98-180, NDB forwards unpaid assessments to the USDA for collection and other legal proceedings. As of December 31, 2002 and 2001, approximately \$367,000 and \$384,000, respectively, of cumulative unpaid assessments were at USDA pending further action. Such amounts are not included in assessments receivable as of December 31, 2002 and 2001, and will not be recorded as revenue until such amounts are ultimately received. Civil penalties exist for any persons who do not pay the assessment and/or file required milk production assessment reports with NDB.

(5) Net Assets

During 2002 and 2001, NDB's Board designated a portion of net assets for use in continued funding of programs and for cash reserves. Total designations of net assets are as follows:

| | 2002 | 2001 |
|--|-----------------|------------------------|
| Domestic marketing Research and evaluation | \$ 643,132 | 724,238 19,622 |
| Total program designations | 643,132 | 743,860 |
| Future year budget Cash reserves | 1,800,000 | 2,307,000 1,800,000 |
| Total designated net assets | 2,443,132 | 4,850,860 |
| Undesignated net assets | 3,833,840 | 2,917,219 |
| Total net assets - unrestricted | \$ 6,276,972 | 7,768,079 |

Notes to Financial Statements December 31, 2002 and 2001

The program designations as of December 31, 2002 and 2001 relate to contract commitments made during the following years:

| | | 2002 | 2001 |
|------|----------------------------|---------------|---------|
| 2002 | | \$ 643,132 | |
| 2001 | | | 743,860 |
| | Total contract commitments | \$ 643,132 | 743,860 |

(6) Transactions with the United States Department of Agriculture

NDB reimburses the USDA for the cost of administrative oversight and compliance audit activities. These reimbursements amounted to \$454,482 and \$471,212 for the years ended December 31, 2002 and 2001, respectively.

Schedule of Reconciliation of Operations Budget Year ended December 31, 2002

| | _ | 2002 Total expenses | Commitments expensed in 2002 | 2002 Commitments | 2002 Operations Budget Statement |
|---|----|---------------------------|------------------------------------|---------------------|----------------------------------|
| Organizational group expenses: | | | | | |
| Domestic marketing group | \$ | 66,496,432 | 724,238 | 643,132 | 66,415,326 |
| Research and evaluation group | | 3,204,090 | 19,622 | _ | 3,184,468 |
| Communications/member relations group | | 10,174,244 | · - | | 10,174,244 |
| Export group | | 4,933,680 | | | 4,933,680 |
| DMI general and administrative | | 2,467,207 | _ | _ | 2,467,207 |
| General and administrative | | 452,260 | | | 452,260 |
| United States Department of Agriculture | _ | 454,482 | | | 454,482 |
| Total organizational group expenses | \$ | 88,182,395 | 743,860 | 643,132 | 88,081,667 |

This schedule reconciles the total expenses from the Statement of Operations and Changes in Fund Balance presented in accordance with accounting principles generally accepted in the United States of America to those reflected in the Operations Budget Statement which is used for management's internal purposes.

The commitments expensed in 2002 represent management's contract commitments established prior to January 1, 2002 which were expensed in the current year.

The 2002 commitments represent management's contract commitments established in 2002 against the 2002 approved program budget operations.

See accompanying independent auditors' report.

APPENDIX D-2

Independent Auditor's Report

To the Board of Directors
National Fluid Milk Processor
Promotion Board
Washington, D.C.

We have audited the accompanying balance sheet of the National Fluid Milk Processor Promotion Board as of December 31, 2002, and the related statements of revenues, expenses and changes in net assets and cash flows for the year then ended. These financial statements are the responsibility of the National Fluid Milk Processor Promotion Board's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the National Fluid Milk Processor Promotion Board as of December 31, 2002, and the results of its operations, changes in its net assets and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated March 11, 2003 on our consideration of the National Fluid Milk Processor Promotion Board's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grants. That report is an integral part of an audit performed in accordance with *Government Auditing Standards*, and should be read in conjunction with this report in considering the results of our audit.

March 11, 2003

Bethesda, Maryland

Snyder, Cohn, Collyer, Hamilton + associates, P.C.

Balance Sheet

| December 31, 2002 | |
|--|----------------------|
| | |
| Assets | |
| Current assets: | |
| Cash and cash equivalents | \$ 14,361,049 |
| Assessments receivable, net of allowance for | |
| uncollectible accounts of \$63,301 | 11,366,903 |
| Interest receivable | 3,807 |
| Other receivables | 200,308 |
| Total assets | <u>\$ 25,932,067</u> |
| Liabilities and net assets | |
| Current liabilities: | |
| Accounts payable | <u>\$ 7,644,096</u> |
| Net assets: | |
| Designated for contingencies | 4,500,000 |
| Undesignated | 13,787,971 |
| Total net assets | 18,287,971 |
| Total liabilities and net assets | \$ 25.932,067 |

Statement of Revenues, Expenses and Changes in Net Assets

| For the year ended December 31, 2002 | |
|--------------------------------------|----------------------|
| Revenues: | |
| Assessments | \$ 107,816,077 |
| Late payment charges | 52,110 |
| Interest income | 288,930 |
| Other | 28,188 |
| Total revenues | 108,185,305 |
| Expenses: | |
| Program expenses: | |
| Media | 73,274,990 |
| Promotions | 5,189,002 |
| Public relations | 10,815,197 |
| Strategic thinking | 978,643 |
| Research | 1,798,862 |
| Medical advisory panel | 73,582 |
| American Heart Association | 120,000 |
| Medical research | - |
| Program management | 1,254,241 |
| Program measurement | <u>114,743</u> |
| Total program expenses | 93,619,260 |
| Other expenses: | |
| California grant | 10,217,674 |
| Administrative | 2,412,146 |
| USDA oversight | 333,445 |
| USDA compliance audit | 3,060 |
| Total other expenses | 12,966,325 |
| Total expenses | 106,585,585 |
| Excess of revenues over expenses | 1,599,720 |
| Net assets - beginning | 16,688,251 |
| Net assets - ending | <u>\$ 18,287,971</u> |

Statement of Cash Flows

| For the year ended December 31, 2002 | |
|--|----------------------|
| | • |
| Cash flows from operating activities: | |
| Excess of revenues over expenses | \$ 1,599,720 |
| Changes in assets and liabilities: | |
| Decrease in assessments receivable | 161,636 |
| Decrease in interest receivable | 5,373 |
| Decrease in other receivables | 784,206 |
| Decrease in prepaid charges | 7,878 |
| Decrease in accounts payable | (8,775,863) |
| Net cash used in operating activities and net decrease | |
| in cash and cash equivalents | (6,217,050) |
| Cash and cash equivalents - beginning | 20,578,099 |
| Cash and cash equivalents - ending | <u>\$ 14,361,049</u> |

Notes to Financial Statements

December 31, 2002

Note 1: Summary of significant accounting policies:

The National Fluid Milk Processor Promotion Board (the Board) was established pursuant to the authority of the Fluid Milk Promotion Act (the Act) of 1990, Subtitle H of the Title XIX of the Food, Agriculture, Conservation and Trade Act of 1990. The purpose of the Board is to administer the provisions of the Fluid Milk Promotion Order (the Order) established pursuant to the Act which establishes an orderly procedure for the development, and the financing through an assessment, of a coordinated program of advertising, promotion, and education for fluid milk products.

The Act requires that a referendum be conducted among processors to determine if a majority favored implementing the fluid milk program. In the October 1993 initial referendum, the majority of processors voted to approve the implementation of the fluid milk program. A continuation referendum was held in February-March 1996. Of the processors voting in that referendum, the majority favored continuation of the fluid milk program. In November 1998, another continuation referendum was held at the request of the Board and processors voted to continue the fluid milk program as established by the Order. The Act and Order state that the United States Department of Agriculture (USDA) will hold future referenda upon the request of the Board, processors representing 10 percent or more of the volume of fluid milk products marketed by those processors voting in the last referendum, or when called by the U.S. Secretary of Agriculture.

For financial reporting purposes, the Board is considered a quasi-governmental agency of the U.S. government. As such, it is exempt from income taxes under the Internal Revenue Code. The USDA and its affiliated agencies operate in an oversight capacity of the Board.

The financial statements of the Board are prepared in conformity with accounting principles generally accepted in the United States of America. To facilitate the understanding of data included in the financial statements, summarized below are the more significant accounting policies.

Assessments - Beginning August 1, 2002, assessments are generated from those processors marketing more than 3,000,000 pounds of fluid milk per month by a 20-cent per hundred weight assessment on fluid milk products processed and marketed commercially in consumer-type packages in the 48 contiguous United States and the District of Columbia. Prior to August 1, 2002, the minimum monthly assessments were generated from processors marketing more than 500,000 pounds of fluid milk per month. Assessment revenue is recognized in the month in which the fluid milk product is processed.

Notes to Financial Statements

December 31, 2002

Note 1: Summary of significant accounting policies: (continued)

Late payment charges are assessed, as provided under the Act, to processors who do not remit monthly assessments within 30 days following the month of assessment. The late payment charge is equal to .015% accrued monthly. At no time does the Board stop accruing interest on these assessments. The Board's management has established a policy of reserving 50% of the late fee charges.

<u>California grant</u> - In accordance with the Act, the Board is required to provide a grant to a third party equal to 80% of the assessments collected from Regions 14 and 15 to Implement a fluid milk promotion campaign. Disbursements under these provisions are recorded as "California Grant" in the accompanying financial statements.

<u>Cash equivalents</u> - For purposes of the statement of cash flows, the Board considers investments with an original maturity of three months or less to be cash equivalents.

<u>Use of estimates</u> - The Board has made certain estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the period. Actual results could differ from those estimates.

<u>Advertising</u> - In accordance with its mission, the Board has approved the development of direct and nondirect response advertising and promotional activities. All costs related to these activities are charged to expense as incurred.

Note 2: Cash and cash equivalents:

At December 31, 2002, the bank balance of the Board's cash deposits was entirely covered by federal depository insurance or was covered by collateral held by the Board's agent in the Board's name.

| | Carrying <u>Value</u> |
|---|--|
| Cash deposits Repurchase agreements Investments | \$ 7,158,732 3,181,757 4,020,560 |
| | \$14,361,049 |

At December 31, 2002, the repurchase agreements were secured as to principal plus accrued interest by U.S. government securities held in the respective banks' safekeeping account, in the Board's name, with the Federal Reserve Bank.

Notes to Financial Statements

December 31, 2002

Note 2: Cash and cash equivalents: (continued)

The Board is required to follow the Agricultural Marketing Service (AMS) investment policy. Accordingly, the Board is authorized to invest in securities consisting of obligations issued or fully insured or guaranteed by the U.S. or any U.S. government agency, including obligations of government-sponsored corporations, and must mature within one year or less from the date of purchase. At December 31, 2002, investments consist entirely of U.S. government agency obligations. Investments are carried at cost, which approximates fair value. The Board's investments are held by the counterparty's trust department or agent in the Board's name.

At December 31, 2002, investments consisted of the following:

| U.S. Securities: | Issue Date | Maturity <u>Date</u> | Interest Rate | Carrying Amount |
|---------------------------------------|----------------------|----------------------|------------------|--------------------------|
| FNMA discount note FFCB discount note | 12/13/02 11/25/02 | 01/16/03 01/07/03 | 1.28% 1.25 | \$2,006,571 2,013,989 |
| | | | | \$4,020,560 |

At December 31, 2002, the Board was owed accrued interest of \$3,807.

Included in cash and cash equivalents is \$4,500,000 of Board designated cash reserves.

Note 3: Compliance matters:

In accordance with the Act and the Order, effective one year after the date of the establishment of the Board, the Board shall not spend in excess of 5% of the assessments collected for the administration of the Board. For the year ended December 31, 2002, the Board did not exceed this limitation.

Note 4: Program administration:

The Board entered into an agreement with the International Dairy Foods Association (IDFA) to administer the fluid milk program. Under this agreement, IDFA engages outside organizations to develop programs for advertising, promotion, consumer education, and certain minority initiatives. There organizations are:

- Bozell Worldwide, Inc.
- Flair Communication, Inc.
- · Weber Shandwick Worldwide
- Siboney USA

Notes to Financial Statements

December 31, 2002

Note 4: Program administration: (continued)

Under this and related agreements, IDFA also directly provides program management, administrative support and employee benefits management services and leases office space to the Board. During the year ended December 31, 2002, the Board incurred approximately \$1,975,000 for directly provided services. At December 31, 2002, the Board owed IDFA \$152,000 for costs billed under these agreements and had advanced to IDFA an additional \$112,000.

Note 5: Commitments:

The Board entered into an agreement during fiscal year 2000 with Walt Disney World Hospitality & Recreation Corporation (WDWHRC), whereby the Board will pay WDWHRC \$1,800,000 each year for the next five years in exchange for the sponsorship and certain promotional rights at the Sports Complex in order to cooperatively develop programs to promote fluid milk products at Walt Disney World Resort.

Note 6: Transactions with the United States Department of Agriculture:

Under the provisions of the Act and the Order, the Board is required to pay the United States Department of Agriculture certain fees for oversight and evaluation costs. These costs were \$362,437 in the year 2002.

Note 7: Related party activity:

Accounting services for the Board are performed by Rubin, Kasnett & Associates, P.C. (RK&A); the cost of these services was \$325,000 during 2002. A principal of RK&A serves as the Chief Financial Officer of the Board and received compensation of \$140,000 for services performed.

NATIONAL FLUID MILK PROCESSOR PROMOTION BOARD AUDIT
SUPPLEMENTARY INFORMATION: PART I

Independent Auditor's Report on Supplementary Information

To the Board of Directors
National Fluid Milk Processor
Promotion Board

Washington, D.C.

Our report on our audit of the basic financial statements of the National Fluid Milk Processor Promotion Board for 2002 appears on page 1. We conducted our audit for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental information presented on pages 11 to 14 for the year ended December 31, 2002 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Snyder, Cohn, Collyer, Harneton + associates, P.C.

March 11, 2003

Bethesda, Maryland

Schedule of Revenues and Expenses Actual Compared to Budget (Budget Basis)

| For the year ended December 31, 2002 | | | | | |
|--------------------------------------|----------------------------------|------------------------|----------------------------------|--|--|
| | Unexpended/ Amended Budget | Current Year Actual | Actual Over (Under) Budget | | |
| Revenues: | | | | | |
| Assessments | \$ 106,650,000 | \$ 107,816,077 | \$ 1,166,077 | | |
| Late payment charges | - | 52,110 | 52,110 | | |
| Interest income | - | 288,930 | 288,930 | | |
| Other | • | 28,188 | 28,188 | | |
| Carryover - prior years | 3,508,525 | | (3,508,525) | | |
| Total revenues | 110,158,525 | 108,185,305 | (1,973,220) | | |
| Expenses: | | | | | |
| Program expenses: | | | | | |
| Program - current year | 96,757,705 | 91,417,744 | (5,339,961) | | |
| Program - prior years | 2,201,516 | 2,201,516 | | | |
| Total program expenses | 98,959,221 | 93,619,260 | (5,339,961 | | |
| Other expenses: | | | | | |
| California grant | 10,145,500 | 10,217,674 | 72,174 | | |
| Administrative | 2,497,724 | 2,412,146 | (85,578 | | |
| USDA oversight | 350,000 | 333,445 | (16,555) | | |
| USDA compliance audit - prior years | 7,540 | 3,060 | (4,480) | | |
| Unallocated | 407,596 | | (407,596) | | |
| Total other expenses | 13,408,360 | 12,966,325 | (442,035) | | |
| Less encumbrances - prior years | (2,209,056) | | 2,209,056 | | |
| Total expenses | 110,158,525 | 106,585,585 | (3,572,940) | | |
| Excess of revenues over expenses | \$ | \$ <u>1,599,720</u> | \$1,599,720 | | |

Schedule of Program Expenses Actual Compared to Budget (Budget Basis)

| Fo | or the year ended December 31, 2002 | | Current Year Amended Budget | (| Expended Current Year Actual | (| Actual Over (Under) Budget | | Prior Year Inexpended Budget | | Expended Prior Year Actual | (| Actual Over (Under) Budget | Total Program Activity |
|-----|-------------------------------------|-----------|-----------------------------------|-------------|------------------------------------|-----------|----------------------------------|-----------|------------------------------------|-------------|----------------------------------|-----------|----------------------------------|------------------------------|
| Ex | penses - 2002 budget | | | | | | | | | | | | | |
| | Media | \$ | 74,416,600 | \$ | 73,107,938 | \$ | (1,308,662) | \$ | 888,395 | \$ | 167,052 | \$ | (721,343) | \$ 73,274,990 |
| | Promotions | | 6,530,500 | | 4,613.186 | | (1,917,314) | | 4,494,831 | | 575,816 | | (3,919,015) | 5,189,002 |
| 101 | Public relations | | 11,025,000 | | 10,706,817 | | (318,183) | | 322,216 | | 108,380 | | (213,836) | 10,815,197 |
| | Strategic thinking | | 900,000 | | 435.373 | | (464,627) | | 744,427 | | 543,270 | | (201,157) | 978,643 |
| | Research | | 1,653,105 | | 1,093.903 | | (559,202) | | 1,265,653 | | 704,959 | | (560,694) | 1,798,862 |
| | Medical advisory panel | | 200,000 | | 73,582 | | (126,418) | | 362,264 | | - | | (362,264) | 73,582 |
| | American Heart Association | | 600,000 | | 120.000 | | (480,000) | | 692,475 | | - | | (692,475) | 120,000 |
| | Medical research | | 50,000 | | - | | (50,000) | | 102,626 | | - | | (102,626) | |
| | Program management | | 1,232,500 | | 1,254.241 | | 21,741 | | - | | - | | - | 1,254,241 |
| | Program measurement | _ | 150,000 | _ | 12.704 | _ | (137,296) | _ | 146,909 | _ | 102,039 | _ | (44,870) | 114,74 |
| To | otal program expenses | <u>\$</u> | 96,757,705 | <u>\$</u> _ | 91,417.744 | <u>\$</u> | (5,339,961) | <u>\$</u> | 9,019,796 | <u>\$</u> _ | 2,201,516 | <u>\$</u> | (6,818,280) | \$ 93,619,26 |

Schedule of Administrative Expenses Actual Compared to Budget (Budget Basis)

| | Current Year Amended Budget | Current Year Actual | Actual Over (Under) <u>Budget</u> | | |
|-----------------------------------|-----------------------------------|------------------------|---|--|--|
| Management contract | \$ 628,500 | \$ 606,485 | \$ (22,015) | | |
| Board meeting expenses | 350,000 | 310,758 | (39,242) | | |
| Staff salaries and benefits: | | | | | |
| Staff salaries and compensation | 372,750 | 381,895 | 9,145 | | |
| Staff retirement benefit | 61,099 | 60,985 | (114) | | |
| Payroll taxes | 13,000 | 13,711 | 711 | | |
| Health insurance | 7,000 | 7,220 | 220 | | |
| Life insurance | 1,300 | 1,417 | 117 | | |
| Disability insurance | 1,400 | 967 | (433) | | |
| Workers compensation | <u>675</u> | 480 | (195) | | |
| Total staff salaries and benefits | 457,224 | 466,675 | 9,451 | | |
| Finance and administration: | | | | | |
| Contract staff | 140,000 | 140,000 | - | | |
| Financial services | 325,000 | 325,000 | | | |
| Total finance and administration | 465,000 | 465,000 | | | |
| Other operating expenses: | | | | | |
| Legal | 200,000 | 188,523 | (11,477) | | |
| Audits | 71,000 | 70,657 | (343) | | |
| Accounting procedures manual | 9,000 | 9,000 | - | | |
| Office facilities | 96,500 | 96,000 | (500) | | |
| Support and maintenance | 18,000 | 18,000 | - | | |
| Staff travel | 105,000 | 100,839 | (4,161) | | |
| Telephone | 5,000 | 2,125 | (2,875) | | |
| Insurance | 32,500 | 32,384 | (116) | | |
| Postage and delivery | 20,000 | 19,768 | (232) | | |
| USDA processor compliance | 40,000 | 25,932 | (14,068) | | |
| Total other operating expenses | 597,000 | 563,228 | (33,772) | | |
| Total administrative expenses | \$ 2,497,724 | \$ 2,412,146 | \$ (85,578) | | |

National Fluid Milk Processor Promotion Board Schedule of Cash Receipts and Disbursements

| For the year ended December 31, 2002 | |
|---|----------------------|
| Cash receipts from operations: | |
| Assessments | \$ 108,761,918 |
| Late payment charges | 52,110 |
| Interest income . | 294,303 |
| Other | 28,188 |
| Total revenues | 109,136,519 |
| Cash disbursements for operations | 115,353,569 |
| Excess of disbursements over operating receipts | (6,217,050) |
| Cash and cash equivalents - beginning | 20,578,099 |
| Cash and cash equivalents - ending | <u>\$ 14,361,049</u> |

NATIONAL FLUID MILK PROCESSOR PROMOTION BOARD AUDIT
SUPPLEMENTARY INFORMATION: PART II

Independent Auditor's Report on Compliance and on Internal Control Over Financial Reporting Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

To the Board of Directors
National Fluid Milk Processor
Promotion Board
Washington, D.C.

We have audited the financial statements of the National Fluid Milk Processor Promotion Board as of and for the year ended December 31, 2002, and have issued our report thereon dated March 11, 2003. We conducted our audit in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States.

Compliance

As part of obtaining reasonable assurance about whether the National Fluid Milk Processor Promotion Board's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered the National Fluid Milk Processor Promotion Board's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over financial reporting and its operation that we consider to be material weaknesses.

To the Board of Directors
National Fluid Milk Processor
Promotion Board
Page two

This report is intended solely for the information and use of the National Fluid Milk Processor Promotion Board, management of the National Fluid Milk Processor Promotion Board, and the Dairy Programs, Promotion and Research Branch of the Agricultural Marketing Service Agency of the United States Department of Agriculture and is not intended to be and should not be used by anyone other than these specified parties.

Snyder, Cohn, Collyer, Hamilton & associates, P.C.

March 11, 2003

Bethesda, Maryland

NATIONAL FLUID MILK PROCESSOR PROMOTION BOARD AUDIT SUPPLEMENTARY INFORMATION: PART III

To the Board of Directors
National Fluid Milk Processor
Promotion Board
Washington, D.C.

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial statement audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the balance sheet of the National Fluid Milk Processor Promotion Board as of December 31, 2002, and the related statements of revenues, expenses, and changes in net assets and cash flows for the year then ended, and have issued our report thereon dated March 11, 2003. The financial statements were prepared in conformity with accounting principles generally accepted in the United States of America.

In connection with our audit, nothing came to our attention, insofar as it relates to accounting matters, that causes us to believe that the National Fluid Milk Processor Promotion Board:

- Failed to comply with laws and regulations applicable to the National Fluid Milk Processor Promotion Board:
- Failed to comply with Section 1160.212, of the Fluid Milk Promotion Order, relating to the use of assessment funds for the purpose of influencing governmental policy or action:
- Expended assessment funds for purposes other than those authorized by the Fluid Milk Promotion Act and the Fluid Milk Promotion Order.
- Expended or obligated assessment funds on any projects prior to the fiscal year in which those funds were authorized to be expended by the National Fluid Milk Processor Promotion Board's approved Budget and Marketing Plan;
- Did not adhere to the original or amended Budget and Marketing Plan for the year ended December 31, 2002;
- Did not obtain a written contract or agreement with any person or entity providing goods or services to the National Fluid Milk Processor Promotion Board:

To the Board of Directors National Fluid Milk Processor Promotion Board Page two

- Failed to comply with Section 1999H, paragraph (g) of the Fluid Milk Promotion Order, relating to the limitations on the types of investments which may be purchased by the National Fluid Milk Processor Promotion Board and the insurance or collateral that must be obtained for all National Fluid Milk Processor Promotion Board deposits and investments;
- Failed to comply with internal controls;
- Failed to comply with disclosure requirements for lease commitments;
- Failed to comply with standards established requiring signed contracts, USDA approval letters (if necessary), contract term documentation within the file, and CFO's signature of the Board approval letter; or
- Failed to comply with the By-laws of the National Fluid Milk Processor Promotion Board or any other policy of the National Fluid Milk Processor Promotion Board, specifically as they relate to all financial matters, including time and attendance, and travel.

However, our audit was not directed primarily toward obtaining knowledge of such noncompliance.

This report is intended solely for the information and use of the National Fluid Milk Processor Promotion Board, management of the National Fluid Milk Processor Promotion Board, and the Dairy Programs, Promotion and Research Branch of the Agricultural Marketing Service Agency of the United States Department of Agriculture and is not intended to be and should not be used by anyone other than these specified parties.

Smyder, Cohn, Collyer, Harmeton + associates, P.C.

March 11, 2003

Bethesda, Maryland

NATIONAL DAIRY BOARD AND DAIRY MANAGEMENT INC. CONTRACTS REVIEWED BY USDA, 2002

Contractor Initiatives

ADVERTISING AND MARKETING

Affina Corporation Real Seal® Certification Program

American Dairy Association/

Dairy Council MidEast
American School Food Service Association
School Food Service Association
School Milk Pilot Consulting Services

Broadcast Traffic and Residuals, Inc. Fluid Milk and Cheese Broadcast Materials and Talent Activities

California Milk Advisory Board Retail Butter Promotion Activities

Campbell Mithun (Bozell Group, LLC) Advertising Services

National Accounts-Cheese Foodservice Activities

Connecticut Marketing Associates Dairy Dollars Newsletter Project

DDB Worldwide Communications Group Cheese Creative Advertising/Media Planning Services

Flair Communications Agency Fluid Milk Sales Promotion Activities Information Television Network Discovery Health Network Series

Inland Printing Company, Inc.

Milk Merchandise Material Production and Distribution

Warehousing and Production of Creative Materials

J. Brown and Associates

DMI Materials Website Maintenance
DMI Cheese Co-Marketing Program

Kellogg's USA, Inc. NASCAR Sponsorship

Joint Milk and Cereal Promotion

Kubin Nicholson Outdoor Paper Production and Warehousing Activities

MS Data Step Real Seal® Internet Site Updates

Marketing Drive Worldwide School Foodservice and Cafeteria Promotional Activities

Media Management Services
School Marketing Strategic Planning
Healthy School Summit Logistics
Midwest Dairy Association
National Retail Account Services

Mott's Inc.

National Retail Account Service
Mott's Inc.

Joint Promotional Activities

Olson Communications School Foodservice Merchandising Materials

Mealtime Sampler Activities
Milk Vending Promotion Kits
School Cafeteria Promotion Activities

School Food Service Foundation Foodservice Program Activities

PUBLIC RELATIONS AND NUTRITION EDUCATION

Association Partners Plus Communications and Cooperative Education Projects

BSMG Marketing Communications Public Relations for Milk, Dairy Image, and Nutrition Education

Creative/Coordination Activities for Odyssey of the Mind Exhibit

Child Nutrition Foundation School Foodservice Program Activities

APPENDIX E

NATIONAL DAIRY BOARD AND DAIRY MANAGEMENT INC. CONTRACTS REVIEWED BY USDA, 2002 (CONTINUED)

Contractor Initiatives

PUBLIC RELATIONS AND NUTRITION EDUCATION (Continued)

Creswell, Munsell, Fultz, and Zirbel DMI Newsletter Project, Industry Relations,

Dairy Confidence Activities

Dairy Farmers, Inc. Communication Activities, NASCAR Public Relations

Edelman Public Relations Worldwide <u>www.dairynutrition.com</u> Development and Maintenance

Dairy Spokesperson Network NCI/DMI Cheese Nutrition Program Cheese Television Ad Launch Activity

Cheese and Butter Public Relations Cheese Product Publicity

Butter Communications Program 3-A-Day Publicity Program NASCAR Publicity Program

Flair Communications Agency Destination Imagination

Fleishman Hillard Reputation Management Program
The Fratelli Group Healthy School Environment Initiative

Luminary Outreach Activities

Healthy Schools Summit Technical Support

Health and Nutrition Network Public Relations

I-Site Web Design <u>www.familyfoodzone.com</u> and <u>nationaldairycouncil.org</u>

Image Base Corporation Video News Release Production

Integer Group Dairy Industry Communications Program

Jerry Dryer Group Dairy Issues Management

Media Management Services Pyramid Café/Pyramid Explorations Newsletter

OM Association/Destination Imagination, Inc. Destination Imagination Sponsorship

Results Direct DMI Website Activities

Tucker-Knapp DMI Customer Service Technical Liaison

Industry Relations Planning Activities
Technology Transfer Marketing Program
Extraordinary Dairy® Marketing (Ingredients)
Nonfat Milk/Whey Program (Do it With Dairy®)

NDC Nutrition Marketing Communications Plan Development

Weber Shandwick, Inc. Reputation and Issues Management

Fluid Milk Public Relations Crisis Preparedness Program Animal Health Message Testing Responsible Production Program

American Academy of Pediatrics® Discovery Channel Series

Dairy Image / Dairy Confidence Program Activities

Willard Bishop Expanding the Reach of Dairy Educational Series

NATIONAL DAIRY BOARD AND DAIRY MANAGEMENT INC. CONTRACTS REVIEWED BY USDA, 2002 (CONTINUED)

Initiatives Contractor

EXPORT

American-Mexican Marketing

Arab Marketing Finance Arc Group, Ltd.

Contacts International Consulting, Ltd.

Dairymark.com

Eastern Strategic Consulting Ltd. Functional Ingredients Research, Inc. Global Trade Information Services International Dairy Foods Association

International Trade Services

IntNet

J.J. Keller and Associates

Jerry Dryer Group

LFRA, Ltd

Landell Mills

Levitt Communication Market Directions Market Solutions, LLC Mistral Group, Ltd.

National Milk Producers Federation

PR Consultants Pacrim Associates Pasin Group

Patricia R. Fuchs & Associates

Promar International

Soluciones Cualitativas

Stratton Publishing & Marketing, Inc.

Uniflex Marketing

3A Business Consulting

Mexican Market Representation and Program Activities Mexican Trade Show and Cheese Promotion Activities Middle East Market Representation and Program Activities

USDEC Corporate Identity Program

South American Market Representation and Program Activities

Whey Permeate Product Supplier Study

Australian Dairy Industry Cooperative Research

Study on Market for Dairy Ingredients Usage in Animal Feeds in

China and Southeast Asia

China/Taiwan Ice Cream and Cheese Market Analysis Korean Whey Nutri-Marketing Conference & Trade Mission

Purchase of World Trade Atlas Update of USDEC Export Manuals

Update of USDEC's International Reference Manuals Korean Market Representation and Program Activities

Cheese Seminar Activities

Update of USDEC Export Manual

Addition of CODEX Milk Standards to Export

Manual CD-ROM

USDEC International Communications Activities

U.S. Cream Cheese and Mozzarella Cheese Comparison with Similar, Leading Cheese Products from Different Origins

Update of Global Dairy Blends Study High Value Whey/Infant Formula Study Export Growth in Indian Dairy Industry Study

International Consulting Services

Dairy Farmer Awareness and Attitude Study

Evaluation of USDEC Ingredients and Brazilian Programs European Market Representation and Program Activities

Global Research Activities

Farm to Consumer Program Activities

Chinese Market Representation and Program Activities

Southeast Asian Market Representation and Program Activities

Australia and New Zealand Trade Mission

USDEC Print Project Management

Mexican Market Study on Milk-Based Beverages

Japanese Dairy Market Study

U.S. Cheese Perceptions Update-Mexico

USDEC Board of Directors Study

Japanese Market Representation and Program Activities

Japanese Dry Ingredients Program

Whey Permeate Business Opportunity Study

NATIONAL DAIRY BOARD AND DAIRY MANAGEMENT INC. CONTRACTS REVIEWED BY USDA, 2002 (CONTINUED)

Contractor **Initiatives**

MARKET AND ECONOMIC RESEARCH

Dairy Farmers of America

Doyle Research Associates

Elrick and Lavidge

Knowledge Networks

Beverage Marketing Corporation of NY Single-Serve Plastic Market Test

Review of the Effectiveness of Generic Milk Programs

School Milk Pilot Consulting Services Cheese Media Monitoring and Analysis

Burelle's Newsclip Analysis Service CFE Solutions, Inc.

School Milk Pilot Consulting/Milk Consumption Research Activities

Healthy Schools Inc. Consulting Services

Dairy Opinion Leader and Dairy Promotion Organization Activities

Milk and Cheese Creative Testing CY Research, Inc.

Cheese Advertising Campaign Impact Assessment Custom Research, Inc.

New England Market NASCAR Research Impact of the Do It With Dairy® Campaign Aseptic Milk Packaging Research Project Kids Milk Advertising Qualitative Research Cheese Advertising Tracking Activities

Milk Advertising Tracking Activity Milk Claims Assessment Research

Milk and Cheese Category Volume Reports Information Resources, Inc.

Oualitative Research for Kid/Mom Strategic Exploration Kaplan Levinson Associates

Spiderman Promotion Research

Fluid Milk Advertising Tracking Research/Mom's Tracking Study Chocolate Milk Advertising Evaluation/Cheese Advertising Tests **MSW**

Milk Radio Advertising Focus Group Analysis

Attitudes and Usage Trends Study Market Facts

Attitudes and Usage Trends Study Analysis Marketecture

Tracking Activities of Public Opinion toward Dairy Products

and the Dairy Industry (Issues Tracker)

Domestic Research Program Activities/Animal Health and Welfare National Milk Producers Federation

Issues Activities

Purchase and Analysis of Marketing Data (SIP Data) NFO Research

Consumer Interest Assessment in Dairy Products Enhanced with

Nutraceuticals

Cheese Consumption Tracking Activity and CREST Foodservice Data **NPD** Group

Eating Patterns Data Report

Purchase of Food Safety Monitor Report Single-Serve Dairy Beverage Research

Milk Innovation Research Prime Consulting Group

Milk-Producing Livestock Cloning/Dairy Consumption Research Pursuant, Inc.

Obesity and Healthcare Research

Research to Standardize and Manage Animal Disease Outbreak

Terminology

Texas Watershed/Dairy Consumption Impact Study

NATIONAL DAIRY BOARD AND DAIRY MANAGEMENT INC. CONTRACTS REVIEWED BY USDA, 2002 (CONTINUED)

<u>Contractor</u> <u>Initiatives</u>

MARKET AND ECONOMIC RESEARCH (Continued)

Roper ASW

Promar International School Milk Pilot Impact Study

RSC-The Quality Measurement Co. 3 A Day Testing Activities/Milk Print Advertising Tests

Cheese Advertising Creative Persuasion Tests Testing and Evaluation for Milk in Schools

Testing and Evaluation for Milk in Schools
Benchmark WAVE Student Surveys

Spectra Marketing Systems Marketing Research Activities
Strategic Marketing Kids Milk Advertising Evaluation

Technomic Evaluation of Whey and Whey Derivative Usage
Teri Gacek Associates Qualitative Marketing Research Assignments

New Cheese Advertising Focus Group Analysis

The Travis Company NDC Promotional Kit Evaluation Research

Widener-Burrows and Associates Qualitative Research for Chocolate Milk Program Analysis

Wirthlin Worldwide School Foodservice Promotion Evaluation
Dairy Producer Communications Survey

NASCAR Research Tests

Pyramid Nutrition Education Program Research

NATIONAL FLUID MILK PROCESSOR PROMOTION BOARD AND INTERNATIONAL DAIRY FOODS ASSOCIATION CONTRACTS REVIEWED BY USDA, 2002

Contract Parties

Susan Baker, M.D.
Susan Barr, Ph.D.
Robert P. Heaney, M.D.-Creighton University
James O. Hill, Ph.D.
Rachel Johnson, Ph.D., R.D.
Jeanette M. Newton-Keith, M.D.
Ronald M. Krauss, M.D.
American Heart Association

Bachtelle and Associates

Beverage Marketing Corporation of New York

Blueprint Communications

Bozell Group, Inc.
Elrick and Lavidge
Evans Communications dba ECI Communications
Flair Communications, Inc.
General Mills, Kraft Foods, Post Cereal,
Kellogg's USA, Inc., Quaker Oats
Inland Printing Company
Marketing Drive Worldwide
Menendez International
Meyers Research Center
Potomac Digitek

Prime Consulting Group

Proctor and Gamble Tremor
Publicidad Siboney
Snyder, Cohn, Collyer, Hamilton & Associates, P.C.
Taylor Nelson Sofres/Market Development
Weber Shandwick, Inc.
(formerly BSMG Mktg. Corp.)
Widner Burrows

Willard Bishop Wirthlin Worldwide

Project Title

Medical Advisory Board Member Services
Certification Mark Licensing Agreement
Product Nomenclature
Vending Seminars

Vending Seminars
Vending Seminar

Marketing Plan Creation/Consulting Services

School Milk Vending Study Multi-Channel Vending Test Administration/Agency Review

National Network, Cable Television, and Local Spot Radio Market Program Measurement

Got milk?® Advertising

Evaluation of Milk Advertising and Usage Video, PowerPoint and Brochure Production Promotional Marketing Services

"Healthy Breakfast" P rogram Evaluation

Milk Reporting Database
Single Serve School Test
Hispanic Market Research
Online Consumer Research Study
Design, Implementation, and Maintenance of
milkplan.org Website
Meeting Facilitation
Development of Education Workshops
Word of Mouth Advocacy Program
Hispanic Promotions and Local Marketing
Audit Services
Hispanic Consumer Market Research
Public Relations Activities and Sponsorships

Interviews to Gauge Chocolate Milk Advertisements
Market Research for Chocolate Milk Television
Advertising
Consulting Services for Retail Space Optimization

Research for Flavored Milk Appeal

NUTRITION AND HEALTH RESEARCH INSTITUTES AND DAIRY FOODS RESEARCH CENTERS, 2002

Nutrition and Health Research Institutes

Research Focus

Diet, Genetics, and Heart Disease Institute

Louisiana State University

Pennington Biomedical Research Center

Relationship of Low-Fat Diets to Heart Disease

Genetics and Nutrition Institute

Dairy Foods Research Centers

Children's Hospital, Oakland Research Institute

Relationship of Genetics, Dietary Fat (Especially Dairy Fat) and Heart Disease

California

California Polytechnic State University University of California at Davis

Research Objectives

Milk Component Characterization, Modification, and Utilization

Dairy Products and Process Technologies: Applications

Dairy Food Safety

Minnesota/South Dakota

University of Minnesota South Dakota State University Genetics of Dairy Starter Cultures
Dairy Food Quality and Safety

Utilization of Dairy Components as Ingredients

Northeast

Cornell University
University of Vermont

Dairy Product Quality

Functional Properties of Dairy Products and Milk

Components
Dairy Product Safety

Dairy Product Processing, Engineering, and Packaging

New Product Development

Southeast

North Carolina State University Mississippi State University

Milk Component Functionality Microbial and Genetic Technologies

Biological and Thermal Processing Technologies Applications to Innovative Products and Processes

Western

Utah State University Oregon State University Brigham Young University

Research of How Dairy Proteins Function and Interact

Practical Research of Dairy Proteins to Design Dairy Protein Systems for Their Use in Food Manufacture Function of Proteins and Enzymes in Low-Fat Cheeses

Wisconsin

University of Wisconsin at Madison

Milkfat Management and Utilization Nonfat Solids Utilization Cheese Technology Quality and Safety

DAIRY FOODS COMPETITIVE RESEARCH ACTIVITIES DURING 2002

| Principal Investigator & Institution | Project Title |
|--|---|
| William R. Aimutis, Ph.D. Land O' Lakes | Physical and Biochemical Changes Associated with Shredded Cheese During Ripening [continued in 2002] |
| Polly Dinsmore-Courtney, Ph.D. Ohio State University Research Foundation | Control of Cheddar Cheese Ripening Via High Pressure Treatment – Part II [began in 2002] |
| Susan E. Duncan, Ph.D. Virginia Polytechnic Institute | Controlled Release of Antioxidants by Polymer Films into Milk [continued in 2002] |
| | Polymeric Inhibition of Photosensitive Reactions of Milk Components [began in 2002] |
| Robert W. Hutkins, Ph.D. Virginia Polytechnic Institute | Utilization of Fructooligosaccharides by Probiotic Bacteria [continued in 2002] |
| Michael E. Mangino, Ph.D. Ohio State University | Partial Denaturation to Improve Heat Stability of Whey Protein – Part II [began in 2002] |
| Joseph E. Marcy, Ph.D. Virginia Polytechnic Institute | Improved Uses of Natamycin to Prevent Mold Spoilage of Cheese [continued in 2002] |
| | Active Packaging to Improve the Quality of UHT Milk [continued in 2002] |
| John U. McGregor, Ph.D. Clemson University | Fluid Dairy Products as Ingredients in Freshly Prepared Coffee House Beverages [continued in 2002] |
| | Enhancing the Shelf Life of Whole Milk Powder [continued in 2002] |
| Ronald L. Richter, Ph.D. Texas A&M University System | Effects of Formulation and Processing on the Emulsion Stability and Sedimentation of Retort Sterilized Dairy-Based Nutritional Products—Part II [began in 2002] |
| Scott Rankin, Ph.D. University of Wisconsin at Madison | Biochemistry of Full and Reduced Fat Cheddar Shred Ripening [continued in 2002] |
| Richard L. Stroshine, Ph.D. Purdue Research Foundation | Low Field Proton Magnetic Resonance for On-Line Monitoring of the Moisture Content of Processed Cheese and Other Dairy Products [continued in 2002] |
| Margaret Swearingen, Ph.D. Land O' Lakes | Calcium Lactate Levels and Incidence of Crystals on Cheddar Cheese [continued in 2002] |

NUTRITION COMPETITIVE RESEARCH ACTIVITIES DURING 2002

| Principal Investigator & Institution | Project Title |
|---|---|
| Dale E. Bauman, Ph.D. Cornell University | Production of CLA-Enriched Butter for Animal Studies of Mammary Cancer [completed in 2002] |
| Jean Harvey-Berino, Ph.D. University of Vermont | Can Dairy Enhance Weight Loss? [began in 2002] |
| Terri D. Boyston, Ph.D. Iowa State University | Development of a Yogurt with Increased CLA Content Produced with Probiotic Bacteria – Part II [began and completed in 2002] |
| Leann L. Birch, Ph.D. Pennsylvania State University | Parental Influence on Girls' Calcium Intake and Bone Mineral Content and Weight Status [continued in 2002] |
| Gary M. Chan, M.D. Children's Medical Center Foundation | The Effects of Dairy Foods on Adolescent Pregnant Mothers and Their Newborn [continued in 2002] |
| | Effects of Milk and Non-Milk Beverages on Young Children's Nutrition and Taste Preferences [completed in 2002] |
| Adam Drewnowski, Ph.D. University of Washington | Diet Quality Indices and the Use of Dairy Products by French Adults: The SUVIMAX Study [completed in 2002] |
| Penny Kris-Eatherton, Ph.D. Pennsylvania State University | Fat Oxidation in Children and Adults [completed in 2002] |
| | Effects of a Dairy-Rich Diet on Blood Pressure and Vascular Reactivity [began in 2002] |
| Rafael Jiminez-Florez, Ph.D. California Polytechnic State University Foundation | Isolation of Milk Membrane Components from Buttermilk and their Impact on Health [continued in 2002] |
| Steve Hertzler, Ph.D. Ohio State University | Colonic Bacterial Adaptation to Lactose in African-American Maldigesters [began in 2002] |
| James Hill, Ph.D. University of Colorado | Role of Dairy Products in Promoting Fat Oxidation in Humans [began in 2002] |
| Clement Ip, Ph.D. Roswell Park Cancer Institute | Mammary Cancer Prevention by CLA-Butter [continued in 2002] |
| Rachel K. Johnson, Ph.D. University of Vermont | The Effect of Flavored Milk on the Quality of Children's Diets [completed in 2002] |
| William J. Kramer, Ph.D. Ball State University | Effects of Increasing Consumption of Milk Products and Exercise Training Programs on Body Consumption, Bone Density, and Muscular Performance in Teenage Boys and Girls – Part II [began and completed in 2002] |

NUTRITION COMPETITIVE RESEARCH ACTIVITIES DURING 2002 (CONTINUED)

| Principal Investigator & Institution | Project Title |
|--|---|
| Teresa A. Marshall, Ph.D. University of Iowa | Assessment of Associations Between Consumption of Milk and Milk Products and Growth and Body Composition in the Young Child [began in 2002] |
| | Identification of the Roles that Dairy Products, Particularly Fluid Milk, Play in Dental Cavities and Fluorosis of Young Children [completed in 2002] |
| Velmir Matkovic, Ph.D. Ohio State University Research Foundation | pQCT of the Forearm in Children with Fractures [continued in 2002] |
| Vikram V. Mistry, Ph.D. South Dakota State University | Effect of Processed Cheese With and Without Vitamin D3 on Vitamin D Status, Parathyroid Hormone and Bone Turnover in the Elderly [began in 2002] |
| Lynn L. Moore, Ph.D. Boston University School of Medicine | Effects of Milk and Milk Products on Changes in Body Fat and Risk of Obesity Throughout Childhood [began in 2002] |
| David Murdy, M.D. betterMD.net | Randomized Controlled Trial of Novel Milk Based Weight Loss in Well Supervised Outpatients [completed in 2002] |
| Aviva Must, Ph.D. Tufts University | Influence of Milk and Milk Products Consumption on Incident Obesity and Changes in Children, Adolescents, and Young Adults [continued in 2002] |
| Theresa A. Nicklas, Ph.D. Baylor College of Medicine | Environmental Influences on Children's Consumption of Dairy Products: Family Environment [began in 2002] |
| Stuart Phillips, Ph.D. McMaster University | Effectiveness of Milk and Soy in the Promotion of an Anabolic Environment to Maximize Increase in Exercise-induced Muscle Protein Balance [began in 2002] |
| | The Effectiveness of Milk Consumption in the Promotion of Resistance- Training Induced Lean Mass Gains in Novice Weightlifters [began in 2002] |
| Susan B. Roberts, Ph.D. New England Medical Center | Physiological and Cognitive Effects of Beverage Consumption [completed in 2002] |
| Eva Maria Schmelz, Ph.D. Wayne State University | Suppression of Colon Cancer by Dietary Sphigolipids and Calcium – Part II [completed in 2002] |
| Debra Sullivan, Ph.D. University of Kansas Medical Center | Effects of Increased Dairy Product Consumption on Blood Pressure in Multi-Ethnic Population of Elementary School Children [continued in 2002] |

NUTRITION COMPETITIVE RESEARCH ACTIVITIES DURING 2002 (CONTINUED)

| Principal Investigator & Institution | Project Title |
|--|---|
| Dorothy Teegarden, Ph.D. Purdue Research Foundation | Effect of Calcium Education Intervention on Body Fat Mass in Adolescents [began in 2002] |
| Warren Thompson, M.D. The Mayo Clinic | Effects of High Dairy, High Fiber, Low Glycemic Index, Low Energy Density Diet on Weight, Body Fat, and Glucose Tolerance [continued in 2002] |
| Kevin Tipton, Ph.D. University of Texas Medical Branch | Ability to Enhance the Stimulation of Muscle Growth by Resistance Exercise [completed in 2002] |
| John P. Vanden Heuvel, Ph.D. Pennsylvania State University | Modulation of Diabetes by Conjugated Linoleic Acid [continued in 2002] |
| Michael B. Zemel, Ph.D. University of Tennessee | Role of Whey Proteins in Enhancing the Anti-Obesity Effects of Calcium [continued in 2002] |
| | Role of Dairy Foods in Reducing Body Fat and Enhancing Weight Loss in African-American Adults [continued in 2002] |
| | Interaction between Calcium Rich Dairy Products and Dietary Micronutrients in Modulating Weight Loss in Obese Mice [completed in 2002] |
| | Role of Dairy Products in Weight Loss: A Multi-Center Project [began in 2002] |

APPENDIX G

QUALIFIED STATE OR REGIONAL DAIRY PRODUCT PROMOTION, RESEARCH, OR NUTRITION EDUCATION PROGRAMS, 2002

Allied Milk Producers' Cooperative, Inc.

495 Blough Road

Hooversville, PA 15936-8207

American Dairy Association and Dairy

Council Mid East

5950 Sharon Woods Boulevard Columbus, OH 43229

American Dairy Association and Dairy Council, Inc.

219 South West Street, Suite 100

Syracuse, NY 13202

American Dairy Association of Alabama

5340 West Fayetteville Road Atlanta, GA 30349-5416

American Dairy Association of Georgia

5340 West Fayetteville Road Atlanta, GA 30349-5416

American Dairy Association of Kentucky

9201 Bunsen Parkway, Suite 100

Louisville, KY 40220

American Dairy Association of Michigan, Inc.

2163 Jolly Road Okemos, MI 48864

American Dairy Association of Mississippi

5340 West Fayetteville Road Atlanta, GA 30349-5416

American Dairy Association of Nebraska, Inc.

8205 F Street

Omaha, NE 68127-1779

American Dairy Association of North Carolina

9201 Bunsen Parkway, Suite 100

Louisville, KY 40220

American Dairy Association of South Carolina

9201 Bunsen Parkway, Suite 100

Louisville, KY 40220

American Dairy Association of South Dakota

2015 Rice Street St. Paul, MN 55113

American Dairy Association of Virginia

9201 Bunsen Parkway, Suite 100

Louisville, KY 40220

California Manufacturing Milk Producers

Advisory Board

3800 Cornucopia Way, Suite D Modesto, CA 95358-9492

California Milk Producers Advisory Board

3800 Cornucopia Way, Suite D Modesto, CA 95358-9492

Dairy Council of California

1101 National Drive, Suite B Sacramento, CA 95834-1945

Dairy Council of Michigan, Inc.

2163 Jolly Road Okemos, MI 48864

Dairy Council of Nebraska, Inc.

8205 F Street

Omaha, NE 68127-1779

Dairy Council of Utah/Nevada

1213 East 2100 South Salt Lake City, UT 84106

Dairy Council of Wisconsin, Inc.

999 Oakmont Plaza Drive, Suite 510

Westmont, IL 60559

Dairy Farmers, Inc.

166 Lookout Place, Suite 100 Maitland, FL 32751-4496

Dairy MAX, Inc.

2415 Avenue J, Suite 111 Arlington, TX 76006-6119

Dairy Promotion, Inc.

Dairy Farmers of America P.O. Box 909700 Kansas City, MO 64190-9700

Georgia Agricultural Commodity Commission for Milk

19 Martin Luther King Jr., S.W., Room 328 Atlanta, GA 30334

Granite State Dairy Promotion

c/o New Hampshire Department of Agriculture 25 Capitol Street, Box 2042 Concord, NH 03302-2042

Idaho Dairy Products Commission

1365 North Orchard, Suite 203 Boise, ID 83706

Illinois Milk Promotion Board

1701 N. Towanda Avenue P.O. Box 2901 Bloomington, IL 61702-2901

Indiana Dairy Industry Development Board

ISTA Center 150 W. Market Street, Suite 414 Indianapolis, IN 46204

Louisiana Dairy Industry Promotion Board

c/o Louisiana Department of Agriculture and Forestry P.O. Box 3334
Baton Rouge, LA 70821-3334

Maine Dairy and Nutrition Council

333 Cony Road Augusta, ME 04330

Maine Dairy Promotion Board

333 Cony Road Augusta, ME 04330

Michigan Dairy Market Program

P.O. Box 8002 Novi, MI 48376-8002

Mid-Atlantic Dairy Association

325 Chestnut Street, Suite 600 Philadelphia, PA 19106

Midwest Dairy Association

2015 Rice Street St. Paul, MN 55113

Midwest Dairy Council

2015 Rice Street St. Paul, MN 55113

Milk for Health on the Niagara Frontier, Inc.

4185 Seneca Street West Seneca, NY 14224

Milk Promotion Services of Indiana, Inc.

9360 Castlegate Drive Indianapolis, IN 46256

Minnesota Dairy Research and Promotion Council

2015 Rice Street St. Paul, MN 55113

Nebraska Dairy Industry Development Board

8205 F Street Omaha, NE 68127-1779

Nevada Farm Bureau Dairy Producers' Committee

2165 Green Vista Drive, Suite 205 Sparks, NV 89431

New England Dairy and Food Council

1034 Commonwealth Avenue Boston, MA 02215

New England Dairy Promotion Board, Inc.

1034 Commonwealth Avenue Boston, MA 02215

New Jersey Dairy Industry Advisory Council

c/o New Jersey Department of Agriculture P.O. Box 330 Trenton, NJ 08625-0330

New York State Department of Agriculture and Markets

Division of Milk Control and Dairy Services 1 Winners Circle Albany, NY 12235-0001

North Dakota Dairy Promotion Commission

2015 Rice Street St. Paul, MN 55113

Oregon Dairy Products Commission

10505 Southwest Barbur Boulevard Portland, OR 97219

1213 East 2100 South Salt Lake City, UT 84106

Utah Dairy Commission

Vermont Dairy Promotion Council 116 State Street, Drawer 20 Montpelier, VT 05620-2901

Washington State Dairy Council

4201 198th Street, S.W., Suite 102 Lynnwood, WA 98036-6757

Washington State Dairy Products Commission 4201 198th Street, S.W., Suite 101 Lynnwood, WA 98036

Western Dairyfarmers' Promotion Association 12000 North Washington Street, Suite 200 Thornton, CO 80241

Wisconsin Milk Marketing Board, Inc. 8418 Excelsior Drive Madison, WI 53717

Pennsylvania Dairy Promotion Program

c/o Pennsylvania Department of Agriculture 2301 North Cameron Street Harrisburg, PA 17110-9408

Promotion Services, Inc. 5340 West Fayetteville Road Atlanta, GA 30349-5416

Rochester Health Foundation, Inc.

c/o American Dairy Association & Dairy Council, Inc. 219 South West Street, Suite 100 Syracuse, NY 13202

St. Louis District Dairy Council 1254 Hanley Industrial Court St. Louis, MO 63144-1912

Southeast United Dairy Industry Association, Inc. 5340 West Fayetteville Road Atlanta, GA 30349-5416

Southwest Dairy Museum, Inc. P.O. Box 936 Sulphur Springs, TX 75483

Tennessee Dairy Promotion Committee 9201 Bunsen Parkway, Suite 100 Louisville, KY 40220

United Dairymen of Arizona 2008 South Hardy Drive Tempe, AZ 85282